



Fast and reliable detection of repeat expansions in spinocerebellar ataxia using exomes

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Fast and reliable detection of repeat expansions in spinocerebellar ataxia using exomes

Authors:

Jean-Loup Méreaux¹, Claire-Sophie Davoine¹, Marie Coutelier¹, Léna Guillot-Noël¹, Anna Castrioto², Perrine Charles³, Giulia Coarelli¹, Claire Ewenczyk³, Stephan Klebe⁴, Anna Heinzmann¹, Aurélie Méneret⁵, Anne-Laure Fauret-Amsellem⁶, Jean-Madeleine de Sainte Agathe⁶, Alexis Brice¹, Alexandra Durr¹

¹ Sorbonne Université, Paris Brain Institute - ICM, Inserm, CNRS, AP-HP, Paris, France

² Grenoble Alpes University Hospital, Grenoble, France

³ Unité de Génétique Clinique, AP-HP, Hôpital Pitié-Salpêtrière, Paris, France

⁴ Department of Neurology, University Hospital Essen, Essen, Germany

⁵ Département de Neurologie, AP-HP, Hôpital Pitié-Salpêtrière, Paris, France

⁶ Unité de Neurogénétique Moléculaire et Cellulaire, AP-HP, Hôpital Pitié-Salpêtrière, Paris, France

Corresponding author: Alexandra Durr, ICM - 47 bd de l'Hôpital, 75013 PARIS,
alexandra.durr@icm-institute.org

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ABSTRACT

Usually, molecular diagnosis of spinocerebellar ataxia is based on a step-by-step approach with targeted sizing of four repeat expansions accounting for most dominant cases, then targeted sequencing of other genes. Nowadays, genome sequencing allows to detect most pathogenic variants in a single step. The *ExpansionHunter* tool can detect expansions in short-read genome sequencing data. Recent studies have shown that *ExpansionHunter* can also be used to identify repeat expansions in exome sequencing data. We tested *ExpansionHunter* on spinocerebellar ataxia exomes, in a research context as a second-line analysis, after exclusion of main CAG repeat expansions in half of the probands. First, we confirmed the detection of expansions in seven known expansion carriers and then, after targeted analysis of *ATXN1,2,3,7, CACNA1A, TBP, ATN1, NOP56, AR* and *HTT* in 498 exomes, we found 22 additional pathogenic expansions. Comparison with capillary migration sizing in 247 individuals and confirmation of all expanded alleles detected by *ExpansionHunter* demonstrated that for these loci, sensitivity and specificity reached 100%. *ExpansionHunter* detected but underestimated the repeats size for larger expansions and the normal alleles distribution at each locus should be taken into account to detect expansions. Exome combined with *ExpansionHunter* is reliable to detect repeat expansions in selected loci as first-line analysis in spinocerebellar ataxia.

Keywords: *ExpansionHunter*, ataxia, high-throughput sequencing, SCA

INTRODUCTION

Repeat expansions are a major underlying molecular cause of neurological diseases.[1] Particularly, in hereditary spinocerebellar ataxia, expansions of repeat sequences in a few genes are the most frequent cause and represent about half of the cases.[2] The current diagnostic strategy is based on the sequential testing of these loci, which gives a low diagnostic rate and costs high resource consumption. As a second-line test, high-throughput whole exome then genome sequencing allows to increase the diagnostic rate by screening a large number of genes at once for single nucleotide variants.[3]

Detection of pathogenic repeats in genes responsible for spinocerebellar ataxia however remains a technical challenge. Large discrepancies in sensitivity and repeat size were reported between laboratories and protocols.[4] So, there is a need for more accurate and specific sizing of repeats. Motif changes, much larger lengths in pathogenic alleles compared to normal alleles, and somatic mosaicism are major difficulties to size repeats, and even more so for non-coding repeats. Moreover, sequencing and PCR biases are added to the previous difficulties, making repeat genotyping and expansion detection more difficult compared to detection of single nucleotide variants.[1]

While using short read sequencing the poor mappability of reads in repeated loci is an additional pitfall towards expansion sizing.[5] This explains the current two-steps diagnostic strategy, to detect expansions then single nucleotide variants, since the detection of expansions is not implemented in sequencing pipelines. *ExpansionHunter* however seems to be a promising sensitive tool to detect expansions from short-read exome sequencing data[6,7] although it was developed to be used with genomes.[8,9] We assessed whether it

was suited for repeat expansions detection in exomes of individuals with spinocerebellar ataxia.

METHODS

Individuals

We included 498 individuals with spinocerebellar ataxia, either index cases or available affected family members. They were all examined by one of the coauthors and selected after extensive neurological workup to rule out other diagnoses. In half of the probands, repeat expansions in *ATXN1,2,3, 7* and *CACNA1A* had previously been excluded. Expansions in *NOP56* had been previously excluded in only few individuals. They provided from two runs of exomes, the run A of 247 individuals, and the run B of 251 individuals. Together with the latter, we sequenced whole exome sequencing seven known expansion carriers: three individuals with known expansions in either *ATXN3*, *ATXN7* or *CACNA1A*; two individuals with *ATXN1* expansions, and two individuals with *ATXN2* expansions. All individuals gave written informed consent, and blood samples were collected in accordance with local French legislation (approval from local ethics committees SPATAx RBM 01-29 and RBM 03-48 or BIOMOV NCT05034172) respecting the European General Data Protection Regulation (GDPR).

Sequencing and repeat sizing

Whole exome sequencing data was generated with the NovaSeq 6000 and S4 Reagent Kit v1.5 (300 cycles, paired-end read length of 150 bases) (Illumina, San Diego, USA) after Twist 2.0 (Twist Bioscience, San Francisco, USA) capture. DRAGEN Germline Pipeline (Illumina, San

Diego, USA) was used to align the reads to the hg38 human reference genome. We sized the repeat sequences with *ExpansionHunter* v5.0.0 according to default catalog and parameters, targeting coding CAG repeat containing genes (*AR*, *ATN1*, *ATXN1,2,3,7*, *CACNA1A*, *HTT* and *TBP*) and *NOP56* (GGCCTG repeat).[8,9] An estimation of the sequencing coverage for each locus was provided from flanking reads by this tool (Supplementary table 1). To compare to a validated reference method, we performed capillary migration sizing for *ATXN1,2,3,7* *CACNA1A*, *TBP* and *ATN1* in all individuals from the run A using Peak Scanner™ Software v1.0 (Thermo Fisher Scientific, Waltham, USA). In the run B we only tested *ExpansionHunter* positive cases with this method. Repeat-primed PCR was necessary to confirm *NOP56* expansions since they are very large and far from normal alleles. Therefore, we did not size them with capillary migration. We did Sanger sequencing to confirm *AR* and *HTT* incidental expansions. Primers and PCR protocols used are in Supplementary tables 2 to 11. We used three calibrators (representing four normal and two expanded alleles measured by Sanger sequencing) for each locus to get adjusted repeats numbers with capillary migration sizing. The *ExpansionHunter* positive cases were defined as individuals with estimated allele sizes beyond the pathogenic threshold of repeats or beyond the corresponding read length of 150 bases (i.e. 25 GGCCTG in *NOP56*), when this pathogenic threshold was beyond the corresponding read length. In *ATXN3*, the selected threshold was from 45 CAG because it is the threshold for intermediate alleles that can be pathogenic if unstable.[10]

Statistical analysis

We performed statistical analyzes with R4.2.1.[11] Qualitative variables were compared with Fisher's test based on numbers and percentages. Mean ± standard deviation [range with

minimum - maximum] were used to describe continuous variables. Median ± median absolute deviation [range with minimum - maximum] were chosen for discrete variables. Wilcoxon test allowed to compare quantitative variables. Results were considered significant with a threshold $p < 0.05$. We used R package *ggplot2* to plot our data.[12]

RESULTS

ExpansionHunter detected all the seven known expansion carriers, as well as ten probands (4.9%) with expansions in the run A and six (2.8%) in the run B which also included six other relatives with expansions (Table) ($p=0.86$). Clinically, the run B included more isolated cases (51.4% versus 35.4%) and individuals with earlier onset (10.9 years younger age at onset on average). In addition, a wider clinical range in the spinocerebellar ataxia spectrum was considered for the second run of exomes and more families with predominant spastic paraplegia were included (111 versus 8, 51.9% versus 3.9%, $p<0.001$).

Table. *ExpansionHunter* detected 22 pathogenic repeat expansions in 498 exomes of individuals with spinocerebellar ataxia

Characteristics at inclusion	Run A	Run B	<i>p</i>
Number of individuals/families	247/206	251/221	
Transmission mode in index cases			<0.001
Multigenerational	102 (49.5%)	81 (37.9%)	0.02
Isolated case	73 (35.4%)	110 (51.4%)	<0.01
Censored	25 (12.1%)	10 (4.7%)	<0.01
Monogenerational	6 (2.9%)	13 (6.1%)	0.16

Mean age at onset in years (\pm SD*) [range]	47.9 (\pm 16) [0-78]	37 (\pm 21.2) [0-78]	<0.001
Expansion detection	10 (4%)	12 (4.8%)	0.64
Index with heterozygous pathogenic repeats [sizes or range with <i>ExpansionHunter</i>]	10 (4.9%)	6 (2.8%)	0.86
<i>ATXN2 / SCA2</i>	3 (1.5%) [39-41]	2 (0.9%) [39-44]	0.68
<i>ATXN3 / SCA3</i>	3 (1.5%) [50-52]	2 (0.9%) [52-60]	0.68
<i>NOP56 / SCA36</i>	2 (1%) [29]	1 (0.5%) [30]	0.62
<i>AR**</i>	1 (0.5%) [39]	0 (0%)	0.49
<i>HTT**</i>	1 (0.5%) [37]	1 (0.5%) [36]	1
<i>ATXN1 / SCA1</i>	0 (0%)	0 (0%)	
<i>ATXN7 / SCA7</i>	0 (0%)	0 (0%)	
<i>CACNA1A / SCA6</i>	0 (0%)	0 (0%)	
<i>TBP / SCA17</i>	0 (0%)	0 (0%)	
<i>ATN1 / DRPLA</i>	0 (0%)	0 (0%)	

Censored defined as one parent deceased before the age at onset of the index case or missing information. Monogenerational defined as at least one affected sib but unaffected parents.

Loci ordered by frequency in the run of exomes A. *SD for Standard Deviation. **Incidental findings

Mean sequencing coverage and median read length were highly variable between loci, individuals and runs of exomes ([Supplementary table 1](#)), with an overall average coverage at the loci of interest of 123X (\pm 94) [2-722]. Only nine loci among three individuals (seven for the same patient) were covered less than 10 times, leading to lower confidence scores for *ExpansionHunter* size estimates.

The distribution of *ExpansionHunter* allele sizes was similar between the two runs of exomes ([Supplementary table 12](#) and [Supplementary figure](#)). The distribution of allele sizes in the run A is represented in [Figure \(A\)](#). Capillary migration sizing confirmed all outliers as pathogenic,

with *ATXN2* and *ATXN3* representing the most frequent forms. There was no false negative patient, undetected by *ExpansionHunter* indicating that sensitivity and specificity were 100% in the run A where we did systematic capillary migration sizing of *ATXN1,2,3,7 CACNA1A, TBP*

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and *ATN1*. Surprisingly, we diagnosed one *ATXN2* patient previously tested negative by

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capillary migration sizing in a diagnosis laboratory.

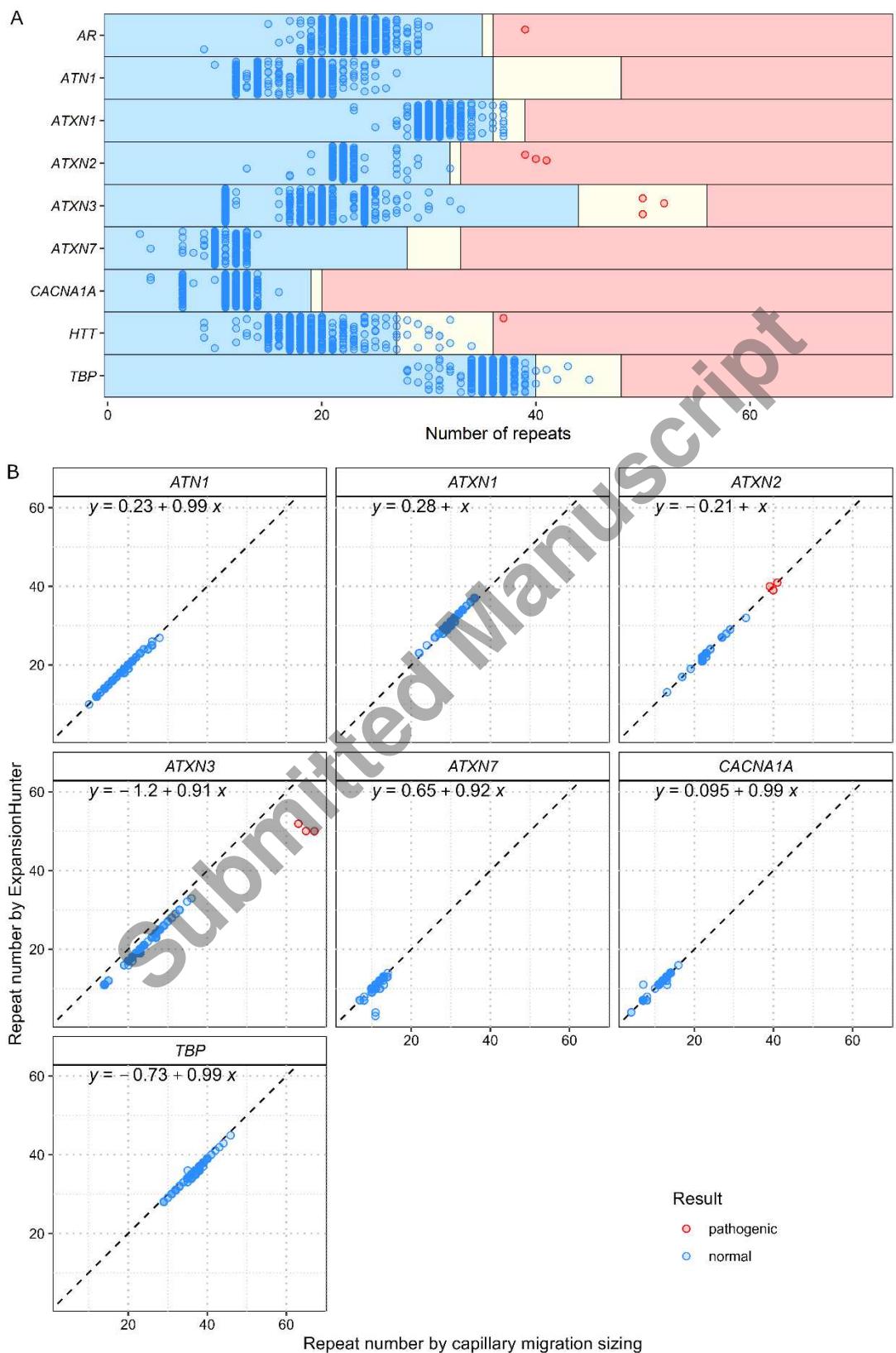


Figure 1. Distribution of ExpansionHunter size estimates in nine genes with (CAG) repeats in 247 exomes of the test series. All alleles in *ATN1*, *ATXN1*, 2, 3 and 7, *CACNA1A* and *TBP* were confirmed by the reference method of capillary migration sizing. Pathogenic alleles are coloured in red, normal alleles in blue. (A) Swimmer plot of the number of repeats measured by ExpansionHunter. For each gene lane, blue, yellow and red areas, respectively, are normal, intermediate and pathogenic repeat sizes according to published thresholds (GeneReviews[10]). (B) Repeat number measured by capillary migration sizing versus estimated by ExpansionHunter.

Surprisingly, apart from typical cerebellar ataxia genes, we found two individuals carrying either an *AR* or an *HTT* expansion in the run A and one patient carrying an *HTT* expansion in the run B. In the run A, one patient carried an *HTT* allele with 37 CAG repeats, in the pathogenic range with reduced penetrance (from 36 to 39 CAG). She presented in her fifties with a very mild gait disorder and dysarthria, evaluated by SARA (Scale for the Assessment and Rating of Ataxia) at 6/40 after 10 years of disease progression, associated with cerebellar atrophy on cerebral MRI. The family history was dominant, since her father and grandfather were reputed to present the same clinical picture which however could not be confirmed clinically. One patient presenting an expanded allele of *AR* with 39 repeats, above the pathogenic threshold with full penetrance (38 CAG). He was an isolated case, whose mother had a clinical diagnosis of Parkinson's disease. In his fifties, he presented walking difficulties and needed to use a cane. Neurological examination showed cerebellar ataxia with a SARA score of 12.5/40, saccadic pursuit, increased reflexes in the lower limbs and extensor plantar responses, decreased vibration sense at ankles (5/8), and cognitive impairment. Electromyography and conduction

velocities were normal, cerebral MRI showed cerebellar atrophy. Clinical data for all individuals with expansions are listed in Supplementary table 13 including the patient carrying *HTT* expansion with 38 CAG repeats of the run B. She presented at age of sixties with falls and spasticity.

The *ExpansionHunter* allele size highly correlated with the capillary migration sizing confirmation (Spearman rho = 0.98, $p < 2.2 \times 10^{-16}$) and could be closely estimated with a linear correlation (*ExpansionHunter* size = 0.9998 * Capillary migration sizing size + 0.5315) (Figure (B)). Among the 3458 systematically sized alleles, 2915 (84.3%) had a size difference to the *ExpansionHunter* value of one repeat or less, 541 had been underestimated by more than one CAG and only two had been overestimated by more than one CAG (Supplementary table 14). Underestimation was more frequent in *ATXN3* (91.1% of underestimated alleles by more than one CAG) and more important for larger alleles above 150 bp (50 CAG repeats), by more than 10 CAG repeats (real size +11/+16/+17 CAG) for the three *ATXN3* expanded alleles (Figure (B)). *NOP56* pathogenic allele sizes are very large (> 800 GGCCTG repeats) making capillary migration sizing unsuitable and repeat primed PCR necessary; *ExpansionHunter* greatly underestimated their size, at 29 or 30 repeats.

DISCUSSION

ExpansionHunter reliably detected repeat expansions in exomes from individuals with spinocerebellar ataxia. Previous reports validated its use in genomes with high sensitivity (97.3%) and specificity (99.6%).[13] Few studies investigated its application on exomes. They reported a loss of specificity (68%), together with necessary manual curation of alignment

graphs to lower the false positive rate,[6] or the need to combine different tools and aligners to get better performances.[7] We did not experience these difficulties, presumably because of twice higher sequencing coverage, improvement of *ExpansionHunter* to v5.0.0 and capture method (TWIST). Despite short read sequencing, we detected short (*CACNA1A*) as well as large expansions (*ATXN3*), from 66 to 243 bp, 22 to 81 CAG repeats, and even very large expansions (*NOP56*) above 4800 bp, 800 repeats.

As already reported in genomes, *ExpansionHunter* used on exome data precisely estimated the sizes of allele shorter than 50 CAG repeats corresponding to the read length of 150 bases.[13] Large normal alleles above 150 bases cannot be discriminated from pathogenic expansions close to this threshold. However, large normal alleles remain below this threshold for the most frequent repeats loci tested in this study (*AR, ATN1, ATXN1,2,3,7 CACNA1A, HTT, TBP* and *NOP56*). Poorly covered and very large expansions (*NOP56, FXN*) were also less accurately sized in genomes.[13] Since some expansions are above the read length, we selected the outliers of median distribution in exome runs with a threshold adapted to *ExpansionHunter* for further investigation, and not only individuals whose estimation exceeded the pathogenic threshold.[10] This was particularly useful in *ATXN3* and *NOP56* where the expansions exceed the read length. Normal repeat sizes distribution for *ExpansionHunter* is available from the gnomAD v3.1 genomes (<https://gnomad.broadinstitute.org/news/2022-01-the-addition-of-short-tandem-repeat-calls-to-gnomad/>).[14] In *NOP56*, a pathogenic threshold at 25 GGCCTG, this underestimation corresponding to the 150 bases of the read length, would be adapted to *ExpansionHunter* since no individuals exceeded 22 in gnomAD.[14] This adapted threshold however required to validate the suspected expansions above the read length with a more accurate technique like

repeat-primed PCR for *NOP56* because the pathogenic threshold is beyond 650 repeats. All our pathogenic alleles were in intermediate or pathogenic sizes ranges, outside the normal distribution. In large expansions, intra-repeat reads containing only repeat sequences can be misaligned. These reads can be analyzed including the off-target loci but this leads to errors for repeat patterns shared with other loci, such as *NOP56* and *TCERG1*.[8,9] In our exomes, using this option did not correct the observed underestimation in *ATXN3*.

This study suggests the high potential clinical impact of *ExpansionHunter* to screen for repeat expansions in exomes in spinocerebellar ataxia and probably in other repeat expansion disorders. Half of the probands included in this study had been previously screened for known expansions, especially when dominant transmission was documented (42.9% of the families reported here). This explains the low proportion of pathogenic expansions found in both runs of exomes, compared to established frequencies in spinocerebellar ataxia. Yet, we showed that *ATXN2* and 3 should also be screened in non-familial cases, since two isolated individuals carried expansions in each gene. In contrast, we did not identify *ATXN1* cases, probably because of a relative lower frequency in France compared to *ATXN2* and 3; and possibly the more severe phenotype in other family members that facilitates the direct expansion diagnosis. The same applied to *NOP56* since we excluded the typical cases in the prescreening. We found in this study 0.7% of the families with a *NOP56* expansion compared to 2% in the literature.[15]

A large screening beyond the classical phenotypes could also be problematic since we detected two individuals with small expansions close to the threshold in *HTT* and one patient in *AR*. The *HTT* repeat expansions were within the range of reduced penetrance; the spinocerebellar signs could hence probably be due to another cause. The *AR* repeat expansion

was not associated with the disease phenotype and so, it was also an incidental finding. While giving a more comprehensive overview of the mutational landscape, the use of global methods such as *ExpansionHunter* raises the dilemma of unsolicited findings, which has to be discussed and anticipated in genetic counselling.

ExpansionHunter is able to detect very large expansions exceeding the length of short reads, which can be difficult to analyze with repeat-primed PCR in routine diagnosis, as reported for *NOP56*.[16] *ExpansionHunter* showed higher sensitivity than the gold-standard sizing method, since we detected an *ATXN2* expansion not seen in a diagnosis setting, potentially due to the preferential amplification of the smaller allele over the longer expanded allele. This was also shown for large *C9orf72* expansions, where the sensitivity of routine repeat-primed PCR was lower than that of *ExpansionHunter*.[8] Compared to genomes, exomes are also hindered by amplification bias, but high enough sequencing coverage (123x for the loci of interest in our study) seems to solve that issue. This could be more problematic, especially when combined to sequencing bias, for repeats as (CGG)_n in *FMR1* or (GAA)_n in *FXN*.[13]

To conclude, the main limit of using whole exome sequencing to detect expansions is the technique's inherent limitation, i.e., the lack of coverage of uncaptured non-coding loci and the short size of the reads. Taking into account the normal distribution of the repeat sizes at a given locus is very important to allow discrimination from the pathogenic expansions. In autosomal recessive cerebellar ataxia, intronic loci such as *FXN* and *RFC1* are of interest, and could then be captured with a specific targeted panel. In autosomal dominant cerebellar ataxia however, *ExpansionHunter* offers the promising opportunity to use whole exome sequencing as a first-line analysis tool to diagnose both expansions and single nucleotide variants.

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DATA AVAILABILITY STATEMENT

All relevant data to the study is included in the article or uploaded as supplementary data.

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COMPETING INTERESTS

There was no competing interest related to this work.

ETHICS APPROVAL STATEMENT

All individuals gave written informed consent, and blood samples were collected in accordance with local French legislation (approval from local ethics committees SPATAx RBM 01-29 and RBM 03-48 or BIOMOV NCT05034172) respecting the European General Data Protection Regulation (GDPR).

CONTRIBUTORSHIP STATEMENT

JLM designed experiments, analyzed the data and wrote the manuscript; CSD, LGN contributed to exome analysis and provided feedback on the report. MC helped with the analysis and interpretation. AC, PC, GC, CE, SK, AH and AM contributed to clinical details. ALF and JMDSA provided technical guidance. AB and AD designed the study, provided access to cohorts, wrote the manuscript and provided financial support. All authors reviewed and approved the manuscript.

SUPPLEMENTARY DATA

Supplementary table 1. Sequencing coverage and read length of each locus of interest in two runs of exomes (498 individuals + 7 known expansion carriers).

Supplementary table 2 to 11: PCR Protocols

Supplementary table 12. Normal allele size distribution by *ExpansionHunter* for each locus of interest in two runs of exomes (498 individuals + 7 known expansion carriers) without pathogenic expanded alleles.

Supplementary table 13. Clinical description of individuals with expansion.

Supplementary table 14. Repeat number by *ExpansionHunter* and capillary sizing (when available) for the 498 individuals + 7 known expansion carriers from two runs of exomes.

Supplementary figure. Allele size density repeat number distribution by *ExpansionHunter* for each locus of interest in two runs of exomes (498 individuals + 7 known expansion carriers).

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Supplementary table 1. Sequencing coverage and read length of each locus of interest in two runs of exomes (498 patients + 7 known expansion carriers).

	Run A (n=247)	Run B (n=251) + 7 known expansion carriers	p
Locus Coverage (standard deviation) [range]	132 (89) [2-546]	115 (98) [9-722]	<0.001
AR	159 (77) [11-467]	150 (84) [33-514]	0.03
ATN1 / DRPLA	256 (84) [12-546]	252 (84) [102-624]	0.25
ATXN1 / SCA1	238 (77) [15-526]	270 (97) [108-722]	<0.001
ATXN2 / SCA2	127 (46) [2-286]	77 (26) [21-171]	<0.001
ATXN3 / SCA3	62 (16) [4-132]	38 (8) [19-65]	<0.001
ATXN7 / SCA7	60 (22) [2-135]	50 (14) [20-98]	<0.001
CACNA1A / SCA6	195 (68) [8-471]	146 (52) [51-381]	<0.001
HTT	69 (26) [3-164]	35 (12) [9-78]	<0.001
NOP56 / SCA36	68 (23) [3-146]	82 (25) [36-177]	<0.001
TBP / SCA17	84 (24) [7-189]	50 (13) [15-101]	<0.001
Locus Median Read Length (median absolute deviation) [range]	141 (3) [130-151]	144 (4) [121-150]	<0.001
AR	140 (3) [132-150]	144 (4) [121-149]	<0.001
ATN1 / DRPLA	140 (3) [132-149]	144 (4) [121-148]	<0.001
ATXN1 / SCA1	141 (3) [131-151]	144 (4) [123-148]	<0.001
ATXN2 / SCA2	142 (1) [135-151]	144 (3) [128-149]	<0.001
ATXN3 / SCA3	142 (1) [136-150]	145 (4) [130-149]	<0.001
ATXN7 / SCA7	139 (3) [130-151]	144 (4) [124-149]	<0.001
CACNA1A / SCA6	142 (\pm 3) [134-150]	144 (\pm 4) [124-149]	<0.001
HTT	143 (\pm 1) [136-150]	145 (\pm 4) [131-150]	<0.001
NOP56 / SCA36	142 (\pm 3) [132-151]	145 (\pm 3) [125-149]	<0.001
TBP / SCA17	140 (\pm 3) [132-150]	144 (\pm 4) [123-149]	<0.001

PCR Protocols

Supplementary table 2. Sizing or Sanger PCR primers

Locus	Primer Forward	Primer Reverse	Amplicon size (bp)
AR	TCCAGAACATCTGTCAGAGCGTGC	GCTGTGAAGGTTGCTGTTCCAT	288
ATN1	CCACCAGTCTCAACACATCACCATCA	CTCCAGTGGTGGGAAATGCTC	141
ATXN1	CTGGCCAACATGGCAGTCTGAG	GCGGAGAACTGAAATGTGGACGTA	223
ATXN2	GCCCCTACCAGTCGCTGAA	GGGCTTGCAGACATTGGCAG	127
ATXN3	CGAGTCCAGTGACTACTTGATTGAAACA	TGAAGTGGCTGGCTGGCTTCACAT	220
ATXN7	CATTGAGGAGCGGAAAGAATGTCGGAG	CCACGACTGTCCCAGCATCACTCA	304
CACNA1A	CGTGTCTATTCCCCGTGATCCGA	CTCCGAGGGCCGCTGGTG	132
HTT	GGGAGACCGCCATGGCGACCCCTGGA	GGCGGTGGCGGCTGGCTGCTGCT	136
TBP	CCTTATGGCACTGGACTGACCCAC	CCTGCTGGACGTTGACTGCTGA	232

Forward primers are labeled with fluorochrome for sizing protocol.

Supplementary table 3. NOP56 Repeat-primed PCR primers

Name	Sequence
NOP56_GE_03_F	CGACGCGACGGTGGGGTTT
R2P3	TACGCATCCCAGTTGAGACG
R2P3_NOP56_GE_04_R3	GCSCAGGCSCAGGCSCAG

R2P3 primer is labeled with fluorochrome. The IUPAC nucleotide codes are used: S is for random guanine (G) or cytosine (C).

Supplementary table 4. Sizing or Sanger PCR for AR, ATN1, ATXN1, 2, 3, 7, CACNA1A and TBP.

TBP.

Element	Volume (μ l)	Final concentration
Nuclease free water	14.1	
10X PCR Buffer with 15mM MgCl2 (Qiagen)	2.5	1X
5X Q-Solution (Qiagen)	5.0	1X
dNTP 25 mM each	0.2	0.2 μ M
Primer F (20 μ M)	1.0	0.8 μ M
Primer R (20 μ M)	1.0	0.8 μ M
Taq DNA polymerase (5U/ μ l) (Qiagen)	0.2	1U/ μ l
DNA (200 ng/ μ l)	1.0	
Total volume	25.0	

Supplementary table 5. PCR program for AR, ATN1, ATXN1, 2, 3, 7, CACNA1A and TBP.

Step		Temperature (°C)	Time duration (minutes)
Initial denaturation		96°C	10 min
35 Cycles	Denaturation	96°C	1 min
	Hybridization	65°C	1 min
	Elongation	72°C	1 min
Final extension		72°C	7 min
Ending		15°C	∞

Supplementary table 6. Sizing or Sanger PCR for HTT.

Element	Volume (μ l)	Final concentration
Nuclease free water	13.6	
10X PCR Buffer with 15mM MgCl ₂ (Qiagen)	2.5	1X
5X Q-Solution (Qiagen)	5.0	1X
dNTP 25 mM each	0.2	0.2 μ M
Primer F (20 μ M)	1.25	0.25 μ M
Primer R (20 μ M)	1.25	0.25 μ M
Taq DNA polymerase (5U/ μ l) (Qiagen)	0.2	1U/ μ l
DNA (200 ng/ μ l)	1.0	
Total volume	25.0	

Supplementary table 7. PCR program for HTT.

Step		Temperature (°C)	Time duration (minutes)
Initial denaturation		96°C	10 min
35 Cycles	Denaturation	96°C	45 sec
	Hybridization-	70°C	2 min 30 sec
	Elongation		
Final extension		72°C	7 min
Ending		15°C	∞

Supplementary table 8. Sizing or Sanger PCR for *NOP56*.

Element	Volume (μ l)	Final concentration
Nuclease free water	12.4	
10X PCR Buffer with 15mM MgCl2 (Qiagen)	2.5	1X
5X Q-Solution (Qiagen)	5.0	1X
dNTP 25 mM each	0.2	0.2 μ M
NOP56_GE_03_F (20 μ M)	1.0	0.8 μ M
R2P3 (20 μ M)	1.0	0.8 μ M
R2P3_NOP56_GE_04_R3 (20 μ M)	0.1	0.08 μ M
Taq DNA polymerase (5U/ μ l) (Qiagen)	0.3	1.5U/ μ l
DNA (25 ng/ μ l)	2.5	
Total volume	25.0	

Supplementary table 9. PCR program for *NOP56*.

Step		Temperature (°C)	Time duration (minutes)
Initial denaturation		96°C	10 min
40 Cycles	Denaturation	96°C	1 min
	Hybridization	63.5°C -0.5°C/cycle from c21 to c29	1 min
	Elongation	72°C	4 min +10 sec/cycle
Final extension		72°C	10 min
Ending		15°C	∞

Supplementary table 10. Purification and sending protocol for Sanger.

Element	Volume (µl)
FastAP Buffer	0.4
FastAP	0.4
Exol	0.2
Nuclease free water	3
Total volume	4

Temperature (°C)	Time duration (minutes)
37°C	15 min
80°C	5 min

Sending to Eurofins (Köln, Germany) for Custom DNA Sequencing	
Element	Volume (µl)
Nuclease free water	13
Primer (Forward ou Reverse) 10 µM	2
Purified PCR	2
Total volume	17

Supplementary table 11. Sending protocol for capillary migration sizing.

Sending to Eurofins (Ebersberg, Germany) for Fragment Length Analysis Service	
Element	Volume (µl)
PCR diluted 1/200	15

Adding of 10µl Hi-Di Formamide loading buffer and 0.5µl internal size standard (LIZ-500) for 2µl of received PCR product. Denaturation of DNA before migration. Standard protocol on ABI 3130XL Genetic Analyzer (Thermo Fisher Scientific, Waltham, USA) with injection time of 18 seconds.

Supplementary table 12. Normal allele size distribution by *ExpansionHunter* for each locus of interest in two runs of exomes (498 patients + 7 known expansion carriers) without pathogenic expanded alleles.

	Run A (n=247)	Run B (n=251) + 7 known expansion carriers	p
Median repeat size (median absolute deviation) [min-max]			
<i>AR</i>	23 (3) [9-30]	23 (3) [12-36]	0.97
<i>ATN1 / DRPLA</i>	19 (1.5) [10-27]	19 (1.5) [12-25]	0.4
<i>ATXN1 / SCA1</i>	31 (1.5) [23-37]	31 (1.5) [17-38]	0.85
<i>ATXN2 / SCA2</i>	22 (0) [13-32]	22 (0) [17-31]	0.31
<i>ATXN3 / SCA3</i>	20 (4.4) [11-33]	20 (4.4) [11-41]	0.59
<i>ATXN7 / SCA7</i>	10 (0) [3-14]	10 (0) [0-17]	<0.001
<i>CACNA1A / SCA6</i>	12 (1.5) [4-16]	11 (1.5) [4-18]	0.07
<i>HTT</i>	17.5 (2.2) [9-34]	17 (1.5) [9-33]	0.7
<i>NOP56 / SCA36</i>	7 (3) [4-13]	7 (3) [3-12]	0.95
<i>TBP / SCA17</i>	36 (1.5) [28-45]	36 (1.5) [28-41]	<0.01

Supplementary table 13. Clinical description of patients with expansion.

Familiy	Individual in family	Exome run	Expansion Locus	Age at onset (years, range)	Sex	Age at examination (years, range)	Signs at Onset	Disability stage* /7 (SARA** /40)	Spasticity (reflexes)	Extrapyramidal signs	Decreased vibration sense at ankles	Cognitive impairment (intellectual development)	ENMG***	Brain MRI
AAD-1333	3	A	AR	45-50	M	55-60	Unsteadiness	4 (12.5)	- (reflexes ++ and EPR)	-	+	Yes (Normal)	Normal	Abnormal (cerebellum atrophy)
AAD-1131	1	A	ATXN2	45-50	M	50-55	Unsteadiness, Dysarthria	3 (13)	-	-	-	No (Normal)	Normal	Abnormal (cerebellum and brainstem atrophy)
AAD-1220	1	A	ATXN2	25-30	M	35-40	Unsteadiness	2 (6.5)	- (lower limbs reflexes ++)	-	-	No (Normal)	Normal	Abnormal (cerebellum and brainstem atrophy)
AAD-966	1	A	ATXN2	45-50	W	50-55	Unsteadiness, Dysarthria	2 (12)	- (normal)	-	+	No (Normal)		Abnormal (cerebellum and brainstem atrophy)
AAD-1102	1	A	ATXN3	50-55	M	55-60	Unsteadiness	4 (10.5)	- (reflexes --)	-	+	No (Normal)	Abnormal	Abnormal (cerebrum and cerebellum atrophy)
AAD-1206	1	A	ATXN3	60-55	W	65-70	Unsteadiness, Dysarthria	3	- (absent reflexes)	+	+	No (Normal)	Abnormal (axonal sensory neuropathy)	Abnormal (cerebellum atrophy)
AAD-1383	1	A	ATXN3	50-55	W	60-65	Unsteadiness	3 (10.5)	- (reflexes ++)	-	+	No (Normal)	Abnormal	Abnormal (cerebellum atrophy)
AAD-1038	1	A	HTT	40-45	W	45-50	Unsteadiness, Dysarthria	2 (6)	-	-		No (Normal)	Normal	Abnormal (cerebrum and cerebellum atrophy)
AAD-1172	1	A	NOP56	50-55	W	60-65	Unsteadiness	6 (25)	+ (reflexes ++ and EPR)	hypokinesia	+	No (Normal)	Normal	Abnormal (cerebellum atrophy)
AAD-1194	1	A	NOP56	45-50	W	50-55	Unsteadiness, Dysarthria, Stiff legs	3 (12.5)	- (reflexes ++ and EPR)	hypokinesia	-	Yes (Normal)	Normal	Abnormal (cerebellum atrophy)
AGE-028	B0194	B	ATXN2	5-10	M	35-40	Unsteadiness	4 (15)	-	-	+	No (Normal)		Abnormal (cerebellum, brainstem and corpus callosum atrophy)
SAL-315	B0169	B	ATXN2	25-30	M	25-30	Dysarthria, Stiff legs, Dysarthria	1	-	-	-	No	Abnormal (axonal sensory neuropathy)	Abnormal (cerebellum and brainstem atrophy)
SAL-315	18	B	ATXN2	35-40	W	60-65	Unsteadiness	5	- (reflexes --)	-	+	No	Abnormal (axonal sensory neuropathy)	Abnormal (cerebellum and brainstem atrophy)
SAL-315	22	B	ATXN2	35-40	M	60-65	Dysarthria, Stiff legs, Dysarthria	6	- (absent patellar reflexes)	-	+	Yes	Abnormal (axonal sensory neuropathy)	Abnormal (cerebrum, cerebellum and brainstem atrophy)
SAL-315	24	B	ATXN2	45-50	W	55-60	Unsteadiness	5	- (absent patellar reflexes and EPR)	-	+	No		Abnormal (cerebellum and brainstem atrophy)

SAL-315	26	B	ATXN2	30-35	W	55-60	Unsteadiness	6	- (absent patellar reflexes)	-	-	Yes	Abnormal (axonal sensory neuropathy)	Abnormal (cerebellum and brainstem atrophy)
SAL-315	32	B	ATXN2	25-30	M	25-30	Unsteadiness	1	- (reflexes ++)	-	-	No	Normal	
SAL-315	40	B	ATXN2	10-15	W	15-20	Unsteadiness	6 (25)	- (absent reflexes)	myoclonus and hypokinesia	+	No (Normal)	Abnormal	Abnormal (brainstem atrophy)
B0071	B0071	B	ATXN3	15-20	M	15-20	Unsteadiness	2 (9)	- (reflexes ++ and EPR)	+	-	No (Normal)		
SAL-713	713	B	ATXN3	40-45	W	40-45	Spasticity	2	+ (normal)	Akinesia, rigidity	-	No (Normal)		Normal
FSP-1584	3	B	HTT	60-65	W	60-65	Falls	2 (2.5)	+ (reflexes ++ and EPR)	-	-	(Normal)		Normal
B0250	B0250	B	NOP56	65-70	W	70-75	Unsteadiness	3 (9.5)	+ (reflexes ++ and EPR)	-	+	No (Normal)		
AAD-1249	9	B (known)	ATXN1		W	35-40		0 (0.5)	-	-	-	No		
AAD-1250	1	B (known)	ATXN1	45-50	W	50-55	Unsteadiness	2 (12)	+ (reflexes ++ and EPR)	-	+	No (Normal)		Abnormal (cerebellum atrophy)
AAD-1159	1	B (known)	ATXN2	55-60	M	55-60	Unsteadiness	2 (6.5)	- (patellar reflexes ++)	-	+	No (Normal)	Normal	Abnormal (cerebellum atrophy)
AAD-1274	1	B (known)	ATXN2	40-45	M	45-50	Unsteadiness	3 (13)	-	hypokinesia		No (Normal)	Normal	
AAD-748	7	B (known)	ATXN3	55-60	W	60-65	Unsteadiness	3	- (normal)	-	+	No		Abnormal (cerebellum atrophy)
AAD-861	8	B (known)	ATXN7	55-60	W	55-60	Unsteadiness	0 (1)	-	-	-	No		Normal
AAD-971	8	B (known)	CACNA1A	55-60	M	65-70	Vertigo	5 (20)	- (reflexes ++)	-		No		Abnormal (cerebellum atrophy)

*Spatax disability stage 0-7 (with 0: no functional handicap; 1: no functional handicap but signs at examination; 2: mild, able to run, walking unlimited; 3: moderate, unable to run, limited walking without aid; 4: severe, walking with one stick; 5: walking with two sticks; 6: unable to walk, requiring wheelchair; 7: confined to bed) (http://www.cgmc-psl.fr/IMG/pdf/NEU_FO_fiche_SPATAX_2009-2.pdf)

SARA: Score of Assessment and Rating of Ataxia. *ENMG: electroneuromyogram. M: man; W: woman; ++: increased; --: decreased; +: present; -: absent.

EPR: extensor plantar reflex.

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Supplementary table 14. Repeat number by ExpansionHunter and capillary sizing (when available) for the**498 patients + 7 known carriers from two runs of exomes.**

Individual number in family	Family	Exome run	Locus	ExpansionHunter repeat number	Capillary migration repeat number	Interpretation
1	AAD-1004	A	AR	21/22		normal
9	AAD-1007	A	AR	20		normal
1	AAD-1008	A	AR	20/25		normal
1	AAD-1011	A	AR	24/25		normal
2	AAD-1011	A	AR	23/25		normal
1	AAD-1012	A	AR	16		normal
1	AAD-1014	A	AR	22		normal
2	AAD-1014	A	AR	24/25		normal
1	AAD-1015	A	AR	19/27		normal
1	AAD-1017	A	AR	22/26		normal
2	AAD-1017	A	AR	22		normal
3	AAD-1017	A	AR	26		normal
4	AAD-1017	A	AR	26		normal
1	AAD-1019	A	AR	21/25		normal
11	AAD-1020	A	AR	19		normal
1	AAD-1021	A	AR	22/23		normal
2	AAD-1021	A	AR	23		normal
1	AAD-1023	A	AR	20/23		normal
1	AAD-1024	A	AR	19		normal
1	AAD-1031	A	AR	29		normal
1	AAD-1032	A	AR	26		normal
1	AAD-1035	A	AR	20/26		normal
1	AAD-1036	A	AR	21		normal
2	AAD-1036	A	AR	21/23		normal
3	AAD-1036	A	AR	21/23		normal
4	AAD-1036	A	AR	21/23		normal
1	AAD-1038	A	AR	20/20		normal
1	AAD-1040	A	AR	17/25		normal
1	AAD-1043	A	AR	21		normal
1	AAD-1044	A	AR	25/29		normal
1	AAD-1046	A	AR	19/22		normal
1	AAD-1048	A	AR	20/23		normal
1	AAD-1050	A	AR	18		normal
3	AAD-1050	A	AR	18/22		normal
4	AAD-1050	A	AR	18/22		normal
1	AAD-1051	A	AR	21/25		normal
2	AAD-1051	A	AR	26		normal
1	AAD-1052	A	AR	24		normal

1	AAD-1058	A	AR	21		normal
1	AAD-1059	A	AR	21		normal
1	AAD-1061	A	AR	22		normal
1	AAD-1063	A	AR	21/26		normal
2	AAD-1063	A	AR	21/26		normal
1	AAD-1064	A	AR	24		normal
2	AAD-1064	A	AR	21		normal
1	AAD-1065	A	AR	25		normal
2	AAD-1065	A	AR	19/25		normal
3	AAD-1065	A	AR	18/25		normal
1	AAD-1067	A	AR	21/28		normal
1	AAD-1068	A	AR	24		normal
1	AAD-1072	A	AR	23/25		normal
1	AAD-1074	A	AR	22		normal
1	AAD-1079	A	AR	21/25		normal
1	AAD-1082	A	AR	25		normal
1	AAD-1085	A	AR	21		normal
1	AAD-1087	A	AR	20		normal
1	AAD-1088	A	AR	26		normal
1	AAD-1089	A	AR	24		normal
1	AAD-1090	A	AR	21/25		normal
1	AAD-1091	A	AR	23		normal
1	AAD-1093	A	AR	20		normal
1	AAD-1096	A	AR	19/28		normal
1	AAD-1097	A	AR	20/26		normal
1	AAD-1101	A	AR	22		normal
1	AAD-1102	A	AR	25		normal
1	AAD-1103	A	AR	19		normal
1	AAD-1104	A	AR	23		normal
1	AAD-1105	A	AR	19		normal
1	AAD-1107	A	AR	23/26		normal
1	AAD-1108	A	AR	24		normal
1	AAD-1110	A	AR	24		normal
1	AAD-1111	A	AR	23/25		normal
1	AAD-1112	A	AR	22/24		normal
2	AAD-1112	A	AR	22/24		normal
1	AAD-1114	A	AR	22/23		normal
1	AAD-1115	A	AR	20/27		normal
1	AAD-1119	A	AR	20/24		normal
1	AAD-1121	A	AR	25/29		normal
2	AAD-1121	A	AR	25/29		normal
1	AAD-1123	A	AR	20		normal
1	AAD-1124	A	AR	23/30		normal
1	AAD-1125	A	AR	22/23		normal
1	AAD-1127	A	AR	21		normal

1	AAD-1130	A	AR	44440		normal
1	AAD-1131	A	AR	25		normal
1	AAD-1133	A	AR	21		normal
1	AAD-1148	A	AR	22/25		normal
2	AAD-1148	A	AR	21		normal
4	AAD-1148	A	AR	19/22		normal
1	AAD-1150	A	AR	24/25		normal
1	AAD-1154	A	AR	23/25		normal
1	AAD-1155	A	AR	21		normal
1	AAD-1156	A	AR	24		normal
1	AAD-1158	A	AR	22/24		normal
1	AAD-1160	A	AR	22		normal
1	AAD-1161	A	AR	26		normal
1	AAD-1163	A	AR	23/25		normal
1	AAD-1164	A	AR	22/23		normal
1	AAD-1165	A	AR	23/24		normal
1	AAD-1171	A	AR	24		normal
1	AAD-1172	A	AR	21/22		normal
1	AAD-1173	A	AR	22		normal
1	AAD-1175	A	AR	23		normal
1	AAD-1176	A	AR	21		normal
1	AAD-1178	A	AR	22/23		normal
1	AAD-1179	A	AR	24		normal
2	AAD-1179	A	AR	24/28		normal
1	AAD-1181	A	AR	22/26		normal
1	AAD-1184	A	AR	23		normal
1	AAD-1185	A	AR	25/26		normal
1	AAD-1190	A	AR	26/27		normal
1	AAD-1191	A	AR	24		normal
1	AAD-1192	A	AR	25/26		normal
1	AAD-1194	A	AR	19/20		normal
1	AAD-1195	A	AR	22		normal
1	AAD-1198	A	AR	21/22		normal
1	AAD-1201	A	AR	25		normal
1	AAD-1205	A	AR	26		normal
1	AAD-1206	A	AR	22/25		normal
1	AAD-1220	A	AR	20		normal
1	AAD-1221	A	AR	22		normal
3	AAD-1247	A	AR	19/20		normal
10	AAD-1251	A	AR	15		normal
3	AAD-1267	A	AR	19/25		normal
2	AAD-1269	A	AR	26/27		normal
4	AAD-1269	A	AR	26		normal
5	AAD-1271	A	AR	28		normal
13	AAD-1280	A	AR	20		normal

4	AAD-1285	A	AR	20/23		normal
3	AAD-1288	A	AR	21		normal
2	AAD-1291	A	AR	27		normal
3	AAD-1294	A	AR	18		normal
3	AAD-1296	A	AR	20		normal
3	AAD-1299	A	AR	28		normal
2	AAD-1300	A	AR	23		normal
8	AAD-1302	A	AR	26		normal
1	AAD-1303	A	AR	20		normal
1	AAD-1304	A	AR	22/22		normal
2	AAD-1304	A	AR	22/25		normal
5	AAD-1306	A	AR	23		normal
5	AAD-1309	A	AR	22/27		normal
6	AAD-1310	A	AR	20/23		normal
4	AAD-1316	A	AR	19/20		normal
2	AAD-1320	A	AR	23		normal
1	AAD-1323	A	AR	23/24		normal
3	AAD-1324	A	AR	22		normal
6	AAD-1325	A	AR	21		normal
1	AAD-1326	A	AR	21/22		normal
2	AAD-1326	A	AR	22		normal
5	AAD-1328	A	AR	20		normal
2	AAD-1329	A	AR	20		normal
10	AAD-1330	A	AR	22		normal
6	AAD-1332	A	AR	24		normal
3	AAD-1333	A	AR	39	39/39	pathogenic
7	AAD-1335	A	AR	22		normal
2	AAD-1336	A	AR	22/23		normal
2	AAD-1340	A	AR	22/23		normal
7	AAD-1341	A	AR	21		normal
2	AAD-1342	A	AR	21		normal
5	AAD-1347	A	AR	21/27		normal
4	AAD-1349	A	AR	22/24		normal
3	AAD-1350	A	AR	20/21		normal
4	AAD-1351	A	AR	19		normal
3	AAD-1352	A	AR	24/29		normal
7	AAD-1352	A	AR	24		normal
1	AAD-1353	A	AR	20		normal
1	AAD-1354	A	AR	26		normal
3	AAD-1355	A	AR	26		normal
5	AAD-1356	A	AR	21/22		normal
7	AAD-1358	A	AR	20		normal
4	AAD-1359	A	AR	21		normal
5	AAD-1360	A	AR	23/24		normal
13	AAD-1362	A	AR	27/29		normal

4	AAD-1363	A	AR	19/20		normal
5	AAD-1364	A	AR	29		normal
1	AAD-1367	A	AR	20		normal
3	AAD-1371	A	AR	26/29		normal
1	AAD-1378	A	AR	22/23		normal
1	AAD-1379	A	AR	27		normal
1	AAD-1380	A	AR	25		normal
1	AAD-1383	A	AR	24/26		normal
1	AAD-1385	A	AR	24		normal
7	AAD-1386	A	AR	23/24		normal
8	AAD-1387	A	AR	21		normal
1	AAD-1398	A	AR	22/26		normal
3	AAD-1398	A	AR	22		normal
346	AAD-1398	A	AR	21		normal
1	AAD-1407	A	AR	20		normal
1	AAD-1410	A	AR	24		normal
9	AAD-386	A	AR	21/24		normal
7	AAD-481	A	AR	20		normal
10	AAD-481	A	AR	19/20		normal
3	AAD-723	A	AR	28		normal
13	AAD-723	A	AR	23/28		normal
7	AAD-726	A	AR	19/24		normal
10	AAD-729	A	AR	22/25		normal
5	AAD-736	A	AR	18		normal
3	AAD-928	A	AR	21/22		normal
20	AAD-928	A	AR	21		normal
8	AAD-935	A	AR	23		normal
1	AAD-952	A	AR	17		normal
1	AAD-958	A	AR	20/23		normal
7	AAD-960	A	AR	23		normal
20	AAD-960	A	AR	23/29		normal
1	AAD-961	A	AR	25		normal
2	AAD-961	A	AR	20/21		normal
1	AAD-963	A	AR	19		normal
1	AAD-966	A	AR	25/27		normal
6	AAD-967	A	AR	23/25		normal
8	AAD-967	A	AR	24		normal
1	AAD-968	A	AR	25		normal
1	AAD-972	A	AR	21/22		normal
2	AAD-972	A	AR	22		normal
4	AAD-973	A	AR	20/26		normal
1	AAD-976	A	AR	22		normal
2	AAD-976	A	AR	22		normal
1	AAD-978	A	AR	24/26		normal
6	AAD-979	A	AR	27		normal

5	AAD-997	A	AR	24		normal
6	AAD-997	A	AR	25		normal
8	AAD-997	A	AR	24		normal
1	AAD-999	A	AR	19/27		normal
7	AAR-319	A	AR	29		normal
1	AAR-549	A	AR	20		normal
3	AAR-875	A	AR	20		normal
3	AAR-880	A	AR	20/25		normal
5	AAR-886	A	AR	21		normal
3	AAR-887	A	AR	21/24		normal
1	AAR-895	A	AR	21/22		normal
24	FPD-1051	A	AR	26		normal
1	FSP-1177	A	AR	21/24		normal
5	FSP-1304	A	AR	22/24		normal
1	FSP-1305	A	AR	19/21		normal
2	FSP-1305	A	AR	19		normal
1	FSP-1307	A	AR	20		normal
7	FSP-1308	A	AR	22/28		normal
11	FSP-1308	A	AR	21/22		normal
3	FSP-403	A	AR	25/26		normal
25	SAL-025	A	AR	24		normal
1069	SAL-1069	A	AR	23/25		normal
167	SAL-167	A	AR	22		normal
4	SAL-307	A	AR	23/24		normal
5	SAL-307	A	AR	23/24		normal
7	SAL-307	A	AR	18/23		normal
780	SAL-780	A	AR	21		normal
904	SAL-904	A	AR	21		normal
995	SAL-995	A	AR	23		normal
13	AAD-1020	B	AR	23/28		normal
1	AAD-1045	B	AR	22		normal
1	AAD-1159	B	AR	26		normal
B0152	AAD-1213	B	AR	22/24		normal
B0153	AAD-1213	B	AR	20/20		normal
9	AAD-1249	B	AR	19/24		normal
1	AAD-1250	B	AR	25/26		normal
B0254	AAD-1261	B	AR	28		normal
1	AAD-1274	B	AR	20		normal
1	AAD-1389	B	AR	26		normal
10	AAD-139	B	AR	22/25		normal
B0006	AAD-1397	B	AR	21/24		normal
3	AAD-1399	B	AR	20		normal
2	AAD-1421	B	AR	25		normal
9	AAD-369	B	AR	20/25		normal
3	AAD-377	B	AR	21		normal

3	AAD-533	B	AR	22		normal
6	AAD-566	B	AR	18/30		normal
9	AAD-566	B	AR	18		normal
10	AAD-566	B	AR	18/30		normal
7	AAD-569	B	AR	20/22		normal
5	AAD-635	B	AR	25		normal
10	AAD-683	B	AR	22/23		normal
12	AAD-683	B	AR	22/23		normal
14	AAD-683	B	AR	23		normal
15	AAD-683	B	AR	21/23		normal
16	AAD-683	B	AR	23/26		normal
5	AAD-743	B	AR	21/24		normal
7	AAD-743	B	AR	21/24		normal
B0080	AAD-743	B	AR	24		normal
7	AAD-748	B	AR	21/26		normal
1	AAD-834	B	AR	24		normal
8	AAD-861	B	AR	21/26		normal
4	AAD-891	B	AR	23		normal
23	AAD-908	B	AR	26		normal
B0079	AAD-908	B	AR	18/19		normal
B0083	AAD-949	B	AR	20/25		normal
8	AAD-971	B	AR	23		normal
3	AAR-242	B	AR	21		normal
5	AAR-500	B	AR	24		normal
16	AAR-512	B	AR	23		normal
1	AAR-676	B	AR	26		normal
1	AAR-740	B	AR	20		normal
B0149	AAR-860	B	AR	20		normal
B0229	AAR-895	B	AR	21/22		normal
10	AAR-912	B	AR	20		normal
B0194	AGE-028	B	AR	29		normal
B0039	B0039	B	AR	18/20		normal
B0040	B0040	B	AR	24		normal
B0047	B0047	B	AR	21		normal
B0071	B0071	B	AR	24		normal
B0126	B0126	B	AR	21/23		normal
B0146	B0146	B	AR	25		normal
B0164	B0164	B	AR	21		normal
B0168	B0168	B	AR	25		normal
B0171	B0171	B	AR	21/24		normal
B0198	B0198	B	AR	22		normal
B0199	B0199	B	AR	22		normal
B0215	B0215	B	AR	22/33		normal
B0244	B0244	B	AR	22/27		normal
B0247	B0247	B	AR	21		normal

B0250	B0250	B	AR	20/21		normal
B0253	B0253	B	AR	31		normal
B0278	B0278	B	AR	19/22		normal
1	CMT-234	B	AR	27		normal
4	CMT-234	B	AR	19/27		normal
16	CMT-234	B	AR	24/27		normal
1	DFT-315	B	AR	22		normal
9	DFT-326	B	AR	22		normal
18	ENE-013	B	AR	20		normal
9	FSP-006	B	AR	20/23		normal
11	FSP-006	B	AR	23		normal
13	FSP-006	B	AR	23		normal
14	FSP-006	B	AR	22/23		normal
20	FSP-056	B	AR	25		normal
21	FSP-056	B	AR	25		normal
1	FSP-078	B	AR	21/22		normal
13	FSP-088	B	AR	24		normal
1	FSP-1009	B	AR	22		normal
4	FSP-1044	B	AR	22/28		normal
1	FSP-1048	B	AR	22		normal
5	FSP-1057	B	AR	15		normal
7	FSP-1057	B	AR	15/23		normal
8	FSP-1059	B	AR	19/23		normal
1	FSP-1060	B	AR	24/26		normal
4	FSP-1062	B	AR	24		normal
1	FSP-1063	B	AR	22/28		normal
5	FSP-1064	B	AR	21/25		normal
6	FSP-1065	B	AR	24/31		normal
6	FSP-1066	B	AR	22/24		normal
3	FSP-1067	B	AR	19		normal
12	FSP-1070	B	AR	22		normal
3	FSP-1071	B	AR	24		normal
11	FSP-1072	B	AR	23/24		normal
1	FSP-1073	B	AR	22		normal
10	FSP-1073	B	AR	22		normal
1	FSP-1076	B	AR	23/24		normal
9	FSP-1081	B	AR	21/22		normal
3	FSP-1096	B	AR	24/28		normal
5	FSP-1098	B	AR	24		normal
4	FSP-1100	B	AR	19/23		normal
4	FSP-1101	B	AR	21		normal
1	FSP-1102	B	AR	20		normal
3	FSP-1105	B	AR	23		normal
3	FSP-1107	B	AR	21/26		normal
4	FSP-1109	B	AR	25		normal

7	FSP-1110	B	AR	21		normal
7	FSP-1111	B	AR	20		normal
3	FSP-1113	B	AR	36		normal
1	FSP-1117	B	AR	23/30		normal
4	FSP-1120	B	AR	19/21		normal
1	FSP-1124	B	AR	21/26		normal
2	FSP-1124	B	AR	21/22		normal
22	FSP-1130	B	AR	26		normal
15	FSP-1131	B	AR	22		normal
3	FSP-1136	B	AR	29		normal
1	FSP-1145	B	AR	19/23		normal
4	FSP-1147	B	AR	24		normal
3	FSP-1148	B	AR	18		normal
1	FSP-1149	B	AR	13		normal
1	FSP-1151	B	AR	22		normal
4	FSP-1152	B	AR	27		normal
5	FSP-1153	B	AR	25		normal
1	FSP-1155	B	AR	22/25		normal
1	FSP-1157	B	AR	21		normal
1	FSP-1164	B	AR	24/24		normal
1	FSP-1171	B	AR	23/24		normal
3	FSP-1172	B	AR	21/25		normal
3	FSP-1174	B	AR	26		normal
1	FSP-1176	B	AR	21/26		normal
3	FSP-1178	B	AR	23/26		normal
1	FSP-1179	B	AR	22/23		normal
7	FSP-1181	B	AR	21		normal
1	FSP-1182	B	AR	25		normal
1	FSP-1185	B	AR	21		normal
1	FSP-1186	B	AR	28		normal
1	FSP-1187	B	AR	21/22		normal
1	FSP-1188	B	AR	21		normal
1	FSP-1189	B	AR	14/27		normal
1	FSP-1191	B	AR	24		normal
1	FSP-1193	B	AR	17/23		normal
1	FSP-1194	B	AR	22/28		normal
1	FSP-1288	B	AR	30		normal
2	FSP-1308	B	AR	28		normal
3	FSP-1308	B	AR	21/24		normal
1	FSP-1359	B	AR	20		normal
1	FSP-1426	B	AR	24/25		normal
1	FSP-1433	B	AR	18		normal
2	FSP-1452	B	AR	20		normal
1	FSP-1455	B	AR	23		normal
1	FSP-1458	B	AR	20		normal

1	FSP-1459	B	AR	19		normal
1	FSP-1467	B	AR	22		normal
1	FSP-1470	B	AR	20/25		normal
1	FSP-1480	B	AR	22/25		normal
1	FSP-1482	B	AR	27		normal
1	FSP-1499	B	AR	24		normal
1	FSP-1500	B	AR	21		normal
1	FSP-1506	B	AR	22/25		normal
1	FSP-1507	B	AR	19/26		normal
2	FSP-1507	B	AR	19		normal
1	FSP-1509	B	AR	20		normal
1	FSP-1510	B	AR	28		normal
1	FSP-1515	B	AR	26		normal
1	FSP-1529	B	AR	22		normal
1	FSP-1531	B	AR	23		normal
1	FSP-1537	B	AR	19/25		normal
1	FSP-1540	B	AR	25		normal
1	FSP-1544	B	AR	25/26		normal
1	FSP-1546	B	AR	22		normal
B0110	FSP-1547	B	AR	23		normal
1	FSP-1548	B	AR	25		normal
1	FSP-1558	B	AR	23		normal
1	FSP-1560	B	AR	17/26		normal
4	FSP-1568	B	AR	21/25		normal
5	FSP-1568	B	AR	25		normal
2	FSP-1569	B	AR	22		normal
B0022	FSP-1570	B	AR	24/24		normal
3	FSP-1573	B	AR	25		normal
5	FSP-1576	B	AR	24		normal
1	FSP-1579	B	AR	24		normal
6	FSP-1582	B	AR	33		normal
8	FSP-1582	B	AR	22		normal
3	FSP-1584	B	AR	21/22		normal
10	FSP-1585	B	AR	25		normal
1	FSP-1586	B	AR	20		normal
2	FSP-1588	B	AR	25		normal
4	FSP-1592	B	AR	20/23		normal
1	FSP-1593	B	AR	23		normal
3	FSP-1593	B	AR	20/23		normal
13	FSP-1594	B	AR	30		normal
6	FSP-1595	B	AR	22/23		normal
7	FSP-1600	B	AR	18/21		normal
6	FSP-1634	B	AR	19/25		normal
2	FSP-1636	B	AR	21/23		normal
3	FSP-1638	B	AR	26/35		normal

B0037	FSP-258	B	AR	24		normal
10	FSP-405	B	AR	20/23		normal
11	FSP-455	B	AR	29		normal
B0241	FSP-491	B	AR	45627		normal
B0182	FSP-820	B	AR	20/24		normal
18	FSP-929	B	AR	19		normal
6	FSP-985	B	AR	22		normal
4	ITD-539	B	AR	22		normal
10	ITD-868	B	AR	24		normal
B0068	ITD-868	B	AR	23		normal
B0109	PED-1526	B	AR	22/23		normal
1057	SAL-105	B	AR	25		normal
1053	SAL-1053	B	AR	19/24		normal
1070	SAL-107	B	AR	21		normal
1082	SAL-108	B	AR	24		normal
1083	SAL-1083	B	AR	19/25		normal
1085	SAL-1085	B	AR	28		normal
1086	SAL-1086	B	AR	22		normal
1088	SAL-1088	B	AR	23		normal
1089	SAL-1089	B	AR	23		normal
1098	SAL-109	B	AR	23		normal
1090	SAL-1090	B	AR	25/27		normal
1	SAL-1100	B	AR	21		normal
3	SAL-1100	B	AR	21		normal
1101	SAL-1101	B	AR	21/31		normal
113	SAL-113	B	AR	19/20		normal
B0233	SAL-113	B	AR	19		normal
4	SAL-1603	B	AR	19/23		normal
B0117	SAL-1606	B	AR	24/25		normal
2	SAL-2806	B	AR	26		normal
18	SAL-315	B	AR	20/21		normal
22	SAL-315	B	AR	25		normal
24	SAL-315	B	AR	20/21		normal
26	SAL-315	B	AR	21/21		normal
32	SAL-315	B	AR	21		normal
38	SAL-315	B	AR	22		normal
40	SAL-315	B	AR	21/23		normal
B0169	SAL-315	B	AR	23		normal
646	SAL-646	B	AR	21		normal
650	SAL-650	B	AR	22/25		normal
654	SAL-654	B	AR	27		normal
713	SAL-713	B	AR	20/22		normal
789	SAL-789	B	AR	21		normal
4	SAL-866	B	AR	26		normal
7	SAL-866	B	AR	22/23		normal

872	SAL-872	B	AR	24		normal
874	SAL-874	B	AR	22/25		normal
878	SAL-878	B	AR	20		normal
881	SAL-881	B	AR	22		normal
883	SAL-883	B	AR	22		normal
887	SAL-887	B	AR	27		normal
891	SAL-891	B	AR	23		normal
892	SAL-892	B	AR	22/25		normal
893	SAL-893	B	AR	20/26		normal
900	SAL-900	B	AR	23/24		normal
901	SAL-901	B	AR	22		normal
902	SAL-902	B	AR	22/23		normal
905	SAL-905	B	AR	22/23		normal
906	SAL-906	B	AR	25		normal
1	SAL-919	B	AR	20		normal
2	SAL-919	B	AR	19		normal
919	SAL-919	B	AR	20		normal
1	AAD-1004	A	ATN1	14/19	14/19	normal
9	AAD-1007	A	ATN1	12/12	12/12	normal
1	AAD-1008	A	ATN1	12/14	12/14	normal
1	AAD-1011	A	ATN1	19/20	19/20	normal
2	AAD-1011	A	ATN1	19/19	19/19	normal
1	AAD-1012	A	ATN1	16/17	16/17	normal
1	AAD-1014	A	ATN1	14/19	14/19	normal
2	AAD-1014	A	ATN1	19/20	19/20	normal
1	AAD-1015	A	ATN1	12/20	12/20	normal
1	AAD-1017	A	ATN1	19/24	19/25	normal
2	AAD-1017	A	ATN1	15/24	15/25	normal
3	AAD-1017	A	ATN1	15/20	15/20	normal
4	AAD-1017	A	ATN1	15/20	15/20	normal
1	AAD-1019	A	ATN1	15/19	15/19	normal
11	AAD-1020	A	ATN1	14/19	14/19	normal
1	AAD-1021	A	ATN1	18/19	19/19	normal
2	AAD-1021	A	ATN1	19/22	19/22	normal
1	AAD-1023	A	ATN1	14/20	14/20	normal
1	AAD-1024	A	ATN1	12/19	12/19	normal
1	AAD-1031	A	ATN1	16/20	16/20	normal
1	AAD-1032	A	ATN1	12/20	12/20	normal
1	AAD-1035	A	ATN1	12/18	12/18	normal
1	AAD-1036	A	ATN1	12/14	12/14	normal
2	AAD-1036	A	ATN1	14/14	14/14	normal
3	AAD-1036	A	ATN1	12/14	12/14	normal
4	AAD-1036	A	ATN1	14/14	14/14	normal
1	AAD-1038	A	ATN1	19/19	19/19	normal
1	AAD-1040	A	ATN1	16/18	16/18	normal

1	AAD-1043	A	<i>ATN1</i>	12/12	12/12	normal
1	AAD-1044	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1046	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1048	A	<i>ATN1</i>	16/20	16/20	normal
1	AAD-1050	A	<i>ATN1</i>	12/21	12/21	normal
3	AAD-1050	A	<i>ATN1</i>	12/20	12/20	normal
4	AAD-1050	A	<i>ATN1</i>	20/21	20/21	normal
1	AAD-1051	A	<i>ATN1</i>	20/21	20/21	normal
2	AAD-1051	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1052	A	<i>ATN1</i>	14/20	14/20	normal
1	AAD-1058	A	<i>ATN1</i>	14/14	14/14	normal
1	AAD-1059	A	<i>ATN1</i>	18/19	19/19	normal
1	AAD-1061	A	<i>ATN1</i>	19/20	20/20	normal
1	AAD-1063	A	<i>ATN1</i>	19/20	19/20	normal
2	AAD-1063	A	<i>ATN1</i>	12/20	12/20	normal
1	AAD-1064	A	<i>ATN1</i>	19/19	19/19	normal
2	AAD-1064	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1065	A	<i>ATN1</i>	19/19	19/19	normal
2	AAD-1065	A	<i>ATN1</i>	12/19	12/19	normal
3	AAD-1065	A	<i>ATN1</i>	19/19	19/19	normal
1	AAD-1067	A	<i>ATN1</i>	12/19	12/19	normal
1	AAD-1068	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1072	A	<i>ATN1</i>	19/23	19/23	normal
1	AAD-1074	A	<i>ATN1</i>	18/20	18/20	normal
1	AAD-1079	A	<i>ATN1</i>	14/14	14/14	normal
1	AAD-1082	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1085	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1087	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1088	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1089	A	<i>ATN1</i>	18/19	19/19	normal
1	AAD-1090	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1091	A	<i>ATN1</i>	17/19	17/19	normal
1	AAD-1093	A	<i>ATN1</i>	20/25	20/26	normal
1	AAD-1096	A	<i>ATN1</i>	12/17	12/17	normal
1	AAD-1097	A	<i>ATN1</i>	14/21	14/21	normal
1	AAD-1101	A	<i>ATN1</i>	16/19	16/19	normal
1	AAD-1102	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1103	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1104	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1105	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1107	A	<i>ATN1</i>	12/19	12/19	normal
1	AAD-1108	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1110	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1111	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1112	A	<i>ATN1</i>	14/19	14/19	normal

2	AAD-1112	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1114	A	<i>ATN1</i>	20/21	20/21	normal
1	AAD-1115	A	<i>ATN1</i>	14/18	14/18	normal
1	AAD-1119	A	<i>ATN1</i>	14/14	14/14	normal
1	AAD-1121	A	<i>ATN1</i>	12/20	12/20	normal
2	AAD-1121	A	<i>ATN1</i>	12/19	12/19	normal
1	AAD-1123	A	<i>ATN1</i>	14/20	14/20	normal
1	AAD-1124	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1125	A	<i>ATN1</i>	15/22	15/22	normal
1	AAD-1127	A	<i>ATN1</i>	19/21	19/21	normal
1	AAD-1130	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1131	A	<i>ATN1</i>	12/20	12/20	normal
1	AAD-1133	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1148	A	<i>ATN1</i>	14/20	14/20	normal
2	AAD-1148	A	<i>ATN1</i>	19/20	19/20	normal
4	AAD-1148	A	<i>ATN1</i>	14/20	14/20	normal
1	AAD-1150	A	<i>ATN1</i>	14/21	14/21	normal
1	AAD-1154	A	<i>ATN1</i>	12/18	12/18	normal
1	AAD-1155	A	<i>ATN1</i>	19/19	19/19	normal
1	AAD-1156	A	<i>ATN1</i>	20/20	20/20	normal
1	AAD-1158	A	<i>ATN1</i>	16/20	16/20	normal
1	AAD-1160	A	<i>ATN1</i>	19/19	19/19	normal
1	AAD-1161	A	<i>ATN1</i>	14/14	14/14	normal
1	AAD-1163	A	<i>ATN1</i>	20/21	20/21	normal
1	AAD-1164	A	<i>ATN1</i>	18/20	18/20	normal
1	AAD-1165	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1171	A	<i>ATN1</i>	17/19	17/19	normal
1	AAD-1172	A	<i>ATN1</i>	20/22	20/22	normal
1	AAD-1173	A	<i>ATN1</i>	14/25	14/26	normal
1	AAD-1175	A	<i>ATN1</i>	18/25	18/26	normal
1	AAD-1176	A	<i>ATN1</i>	12/13	12/13	normal
1	AAD-1178	A	<i>ATN1</i>	19/19	19/19	normal
1	AAD-1179	A	<i>ATN1</i>	19/23	19/23	normal
2	AAD-1179	A	<i>ATN1</i>	19/23	19/23	normal
1	AAD-1181	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1184	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1185	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1190	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1191	A	<i>ATN1</i>	12/14	12/14	normal
1	AAD-1192	A	<i>ATN1</i>	19/19	19/19	normal
1	AAD-1194	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1195	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1198	A	<i>ATN1</i>	16/19	16/19	normal
1	AAD-1201	A	<i>ATN1</i>	12/20	12/20	normal
1	AAD-1205	A	<i>ATN1</i>	13/19	13/19	normal

1	AAD-1206	A	<i>ATN1</i>	17/17	17/17	normal
1	AAD-1220	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1221	A	<i>ATN1</i>	19/19	19/19	normal
3	AAD-1247	A	<i>ATN1</i>	14/20	14/20	normal
10	AAD-1251	A	<i>ATN1</i>	12/20	12/20	normal
3	AAD-1267	A	<i>ATN1</i>	12/16	12/16	normal
2	AAD-1269	A	<i>ATN1</i>	15/19	15/19	normal
4	AAD-1269	A	<i>ATN1</i>	12/19	12/19	normal
5	AAD-1271	A	<i>ATN1</i>	19/19	19/19	normal
13	AAD-1280	A	<i>ATN1</i>	14/20	14/20	normal
4	AAD-1285	A	<i>ATN1</i>	19/21	19/21	normal
3	AAD-1288	A	<i>ATN1</i>	14/22	14/22	normal
2	AAD-1291	A	<i>ATN1</i>	19/19	19/19	normal
3	AAD-1294	A	<i>ATN1</i>	16/19	16/19	normal
3	AAD-1296	A	<i>ATN1</i>	14/19	14/19	normal
3	AAD-1299	A	<i>ATN1</i>	20/21	20/21	normal
2	AAD-1300	A	<i>ATN1</i>	18/20	18/20	normal
8	AAD-1302	A	<i>ATN1</i>	14/14	14/14	normal
1	AAD-1303	A	<i>ATN1</i>	12/13	12/13	normal
1	AAD-1304	A	<i>ATN1</i>	14/19	14/19	normal
2	AAD-1304	A	<i>ATN1</i>	14/17	14/17	normal
5	AAD-1306	A	<i>ATN1</i>	10/12	10/12	normal
5	AAD-1309	A	<i>ATN1</i>	19/20	19/20	normal
6	AAD-1310	A	<i>ATN1</i>	12/26	12/26	normal
4	AAD-1316	A	<i>ATN1</i>	12/14	12/14	normal
2	AAD-1320	A	<i>ATN1</i>	12/22	12/22	normal
1	AAD-1323	A	<i>ATN1</i>	21/25	21/26	normal
3	AAD-1324	A	<i>ATN1</i>	14/19	14/19	normal
6	AAD-1325	A	<i>ATN1</i>	14/20	14/20	normal
1	AAD-1326	A	<i>ATN1</i>	14/20	14/20	normal
2	AAD-1326	A	<i>ATN1</i>	14/14	14/14	normal
5	AAD-1328	A	<i>ATN1</i>	18/19	19/19	normal
2	AAD-1329	A	<i>ATN1</i>	12/21	12/21	normal
10	AAD-1330	A	<i>ATN1</i>	20/20	20/20	normal
6	AAD-1332	A	<i>ATN1</i>	18/20	18/20	normal
3	AAD-1333	A	<i>ATN1</i>	19/20	20/20	normal
7	AAD-1335	A	<i>ATN1</i>	13/19	13/19	normal
2	AAD-1336	A	<i>ATN1</i>	14/19	14/19	normal
2	AAD-1340	A	<i>ATN1</i>	12/19	12/19	normal
7	AAD-1341	A	<i>ATN1</i>	14/18	14/18	normal
2	AAD-1342	A	<i>ATN1</i>	12/20	12/20	normal
5	AAD-1347	A	<i>ATN1</i>	12/20	12/20	normal
4	AAD-1349	A	<i>ATN1</i>	12/19	12/19	normal
3	AAD-1350	A	<i>ATN1</i>	19/19	19/19	normal
4	AAD-1351	A	<i>ATN1</i>	16/16	16/16	normal

3	AAD-1352	A	<i>ATN1</i>	12/14	12/14	normal
7	AAD-1352	A	<i>ATN1</i>	12/14	12/14	normal
1	AAD-1353	A	<i>ATN1</i>	20/20	20/20	normal
1	AAD-1354	A	<i>ATN1</i>	14/19	14/19	normal
3	AAD-1355	A	<i>ATN1</i>	12/20	12/20	normal
5	AAD-1356	A	<i>ATN1</i>	19/20	19/20	normal
7	AAD-1358	A	<i>ATN1</i>	19/21	19/21	normal
4	AAD-1359	A	<i>ATN1</i>	18/21	18/21	normal
5	AAD-1360	A	<i>ATN1</i>	14/19	14/19	normal
13	AAD-1362	A	<i>ATN1</i>	20/21	20/21	normal
4	AAD-1363	A	<i>ATN1</i>	13/19	13/19	normal
5	AAD-1364	A	<i>ATN1</i>	20/21	20/21	normal
1	AAD-1367	A	<i>ATN1</i>	14/19	14/19	normal
3	AAD-1371	A	<i>ATN1</i>	18/18	18/18	normal
1	AAD-1378	A	<i>ATN1</i>	12/19	12/19	normal
1	AAD-1379	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-1380	A	<i>ATN1</i>	18/20	18/20	normal
1	AAD-1383	A	<i>ATN1</i>	18/19	18/19	normal
1	AAD-1385	A	<i>ATN1</i>	20/21	20/21	normal
7	AAD-1386	A	<i>ATN1</i>	12/20	12/20	normal
8	AAD-1387	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-1398	A	<i>ATN1</i>	14/19	14/19	normal
3	AAD-1398	A	<i>ATN1</i>	21/24	21/24	normal
346	AAD-1398	A	<i>ATN1</i>	21/24	21/25	normal
1	AAD-1407	A	<i>ATN1</i>	21/23	21/23	normal
1	AAD-1410	A	<i>ATN1</i>	12/20	12/20	normal
9	AAD-386	A	<i>ATN1</i>	16/19	16/19	normal
7	AAD-481	A	<i>ATN1</i>	14/20	14/20	normal
10	AAD-481	A	<i>ATN1</i>	14/19	14/19	normal
3	AAD-723	A	<i>ATN1</i>	19/20	19/20	normal
13	AAD-723	A	<i>ATN1</i>	20/20	20/20	normal
7	AAD-726	A	<i>ATN1</i>	18/19	18/19	normal
10	AAD-729	A	<i>ATN1</i>	12/20	12/20	normal
5	AAD-736	A	<i>ATN1</i>	19/19	19/19	normal
3	AAD-928	A	<i>ATN1</i>	19/19	19/19	normal
20	AAD-928	A	<i>ATN1</i>	19/23	19/23	normal
8	AAD-935	A	<i>ATN1</i>	14/19	14/19	normal
1	AAD-952	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-958	A	<i>ATN1</i>	18/20	18/20	normal
7	AAD-960	A	<i>ATN1</i>	16/21	16/21	normal
20	AAD-960	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-961	A	<i>ATN1</i>	12/14	12/14	normal
2	AAD-961	A	<i>ATN1</i>	18/19	19/19	normal
1	AAD-963	A	<i>ATN1</i>	19/20	19/20	normal
1	AAD-966	A	<i>ATN1</i>	19/20	19/20	normal

6	AAD-967	A	ATN1	14/20	14/20	normal
8	AAD-967	A	ATN1	20/21	20/21	normal
1	AAD-968	A	ATN1	14/19	14/19	normal
1	AAD-972	A	ATN1	12/20	12/20	normal
2	AAD-972	A	ATN1	14/18	14/18	normal
4	AAD-973	A	ATN1	12/20	12/20	normal
1	AAD-976	A	ATN1	18/20	18/20	normal
2	AAD-976	A	ATN1	18/19	18/19	normal
1	AAD-978	A	ATN1	18/22	18/22	normal
6	AAD-979	A	ATN1	19/19	19/19	normal
5	AAD-997	A	ATN1	19/19	19/19	normal
6	AAD-997	A	ATN1	12/19	12/19	normal
8	AAD-997	A	ATN1	19/20	19/20	normal
1	AAD-999	A	ATN1	19/20	19/20	normal
7	AAR-319	A	ATN1	18/19	19/19	normal
1	AAR-549	A	ATN1	19/22	19/22	normal
3	AAR-875	A	ATN1	19/20	19/20	normal
3	AAR-880	A	ATN1	19/21	19/21	normal
5	AAR-886	A	ATN1	21/24	21/24	normal
3	AAR-887	A	ATN1	21/22	21/22	normal
1	AAR-895	A	ATN1	19/21	19/21	normal
24	FPD-1051	A	ATN1	17/20	17/20	normal
1	FSP-1177	A	ATN1	12/21	12/21	normal
5	FSP-1304	A	ATN1	14/20	14/20	normal
1	FSP-1305	A	ATN1	12/14	12/14	normal
2	FSP-1305	A	ATN1	14/19	14/19	normal
1	FSP-1307	A	ATN1	12/19	12/19	normal
7	FSP-1308	A	ATN1	15/20	15/20	normal
11	FSP-1308	A	ATN1	15/23	15/23	normal
3	FSP-403	A	ATN1	19/21	19/21	normal
25	SAL-025	A	ATN1	19/19	19/19	normal
1069	SAL-1069	A	ATN1	20/24	20/24	normal
167	SAL-167	A	ATN1	19/21	19/21	normal
4	SAL-307	A	ATN1	16/19	16/19	normal
5	SAL-307	A	ATN1	16/19	16/19	normal
7	SAL-307	A	ATN1	19/20	19/20	normal
780	SAL-780	A	ATN1	19/27	19/28	normal
904	SAL-904	A	ATN1	12/20	12/20	normal
995	SAL-995	A	ATN1	12/18	12/18	normal
13	AAD-1020	B	ATN1	14/19		normal
1	AAD-1045	B	ATN1	16/21		normal
1	AAD-1159	B	ATN1	19/19		normal
B0152	AAD-1213	B	ATN1	20/21		normal
B0153	AAD-1213	B	ATN1	12/19		normal
9	AAD-1249	B	ATN1	18/19		normal

1	AAD-1250	B	ATN1	14/18		normal
B0254	AAD-1261	B	ATN1	12/22		normal
1	AAD-1274	B	ATN1	16/17		normal
1	AAD-1389	B	ATN1	14/18		normal
10	AAD-139	B	ATN1	19/21		normal
B0006	AAD-1397	B	ATN1	14/19		normal
3	AAD-1399	B	ATN1	12/17		normal
2	AAD-1421	B	ATN1	14/19		normal
9	AAD-369	B	ATN1	12/16		normal
3	AAD-377	B	ATN1	12/14		normal
3	AAD-533	B	ATN1	12/12		normal
6	AAD-566	B	ATN1	16/20		normal
9	AAD-566	B	ATN1	12/16		normal
10	AAD-566	B	ATN1	16/19		normal
7	AAD-569	B	ATN1	19/20		normal
5	AAD-635	B	ATN1	15/19		normal
10	AAD-683	B	ATN1	19/22		normal
12	AAD-683	B	ATN1	19/22		normal
14	AAD-683	B	ATN1	20/22		normal
15	AAD-683	B	ATN1	12/22		normal
16	AAD-683	B	ATN1	14/19		normal
5	AAD-743	B	ATN1	19/20		normal
7	AAD-743	B	ATN1	19/21		normal
B0080	AAD-743	B	ATN1	12/19		normal
7	AAD-748	B	ATN1	19/20		normal
1	AAD-834	B	ATN1	19/19		normal
8	AAD-861	B	ATN1	14/19		normal
4	AAD-891	B	ATN1	18/19		normal
23	AAD-908	B	ATN1	12/20		normal
B0079	AAD-908	B	ATN1	12/19		normal
B0083	AAD-949	B	ATN1	19/19		normal
8	AAD-971	B	ATN1	19/20		normal
3	AAR-242	B	ATN1	18/19		normal
5	AAR-500	B	ATN1	12/20		normal
16	AAR-512	B	ATN1	18/19		normal
1	AAR-676	B	ATN1	14/19		normal
1	AAR-740	B	ATN1	18/19		normal
B0149	AAR-860	B	ATN1	19/20		normal
B0229	AAR-895	B	ATN1	19/21		normal
10	AAR-912	B	ATN1	12/16		normal
B0194	AGE-028	B	ATN1	16/19		normal
B0039	B0039	B	ATN1	14/20		normal
B0040	B0040	B	ATN1	12/19		normal
B0047	B0047	B	ATN1	19/20		normal
B0071	B0071	B	ATN1	16/20		normal

B0126	B0126	B	<i>ATN1</i>	12/12		normal
B0146	B0146	B	<i>ATN1</i>	16/21		normal
B0164	B0164	B	<i>ATN1</i>	14/20		normal
B0168	B0168	B	<i>ATN1</i>	15/17		normal
B0171	B0171	B	<i>ATN1</i>	16/19		normal
B0198	B0198	B	<i>ATN1</i>	12/20		normal
B0199	B0199	B	<i>ATN1</i>	18/19		normal
B0215	B0215	B	<i>ATN1</i>	14/16		normal
B0244	B0244	B	<i>ATN1</i>	14/19		normal
B0247	B0247	B	<i>ATN1</i>	12/19		normal
B0250	B0250	B	<i>ATN1</i>	19/20		normal
B0253	B0253	B	<i>ATN1</i>	21/22		normal
B0278	B0278	B	<i>ATN1</i>	14/20		normal
1	CMT-234	B	<i>ATN1</i>	12/20		normal
4	CMT-234	B	<i>ATN1</i>	12/19		normal
16	CMT-234	B	<i>ATN1</i>	12/17		normal
1	DFT-315	B	<i>ATN1</i>	20/21		normal
9	DFT-326	B	<i>ATN1</i>	18/19		normal
18	ENE-013	B	<i>ATN1</i>	14/19		normal
9	FSP-006	B	<i>ATN1</i>	12/19		normal
11	FSP-006	B	<i>ATN1</i>	12/22		normal
13	FSP-006	B	<i>ATN1</i>	12/19		normal
14	FSP-006	B	<i>ATN1</i>	19/19		normal
20	FSP-056	B	<i>ATN1</i>	12/12		normal
21	FSP-056	B	<i>ATN1</i>	12/12		normal
1	FSP-078	B	<i>ATN1</i>	20/20		normal
13	FSP-088	B	<i>ATN1</i>	12/19		normal
1	FSP-1009	B	<i>ATN1</i>	19/21		normal
4	FSP-1044	B	<i>ATN1</i>	19/25		normal
1	FSP-1048	B	<i>ATN1</i>	19/19		normal
5	FSP-1057	B	<i>ATN1</i>	19/20		normal
7	FSP-1057	B	<i>ATN1</i>	19/20		normal
8	FSP-1059	B	<i>ATN1</i>	17/22		normal
1	FSP-1060	B	<i>ATN1</i>	19/20		normal
4	FSP-1062	B	<i>ATN1</i>	19/22		normal
1	FSP-1063	B	<i>ATN1</i>	20/24		normal
5	FSP-1064	B	<i>ATN1</i>	19/20		normal
6	FSP-1065	B	<i>ATN1</i>	19/19		normal
6	FSP-1066	B	<i>ATN1</i>	14/17		normal
3	FSP-1067	B	<i>ATN1</i>	18/20		normal
12	FSP-1070	B	<i>ATN1</i>	12/22		normal
3	FSP-1071	B	<i>ATN1</i>	20/24		normal
11	FSP-1072	B	<i>ATN1</i>	19/19		normal
1	FSP-1073	B	<i>ATN1</i>	18/19		normal
10	FSP-1073	B	<i>ATN1</i>	14/19		normal

1	FSP-1076	B	<i>ATN1</i>	19/20		normal
9	FSP-1081	B	<i>ATN1</i>	19/20		normal
3	FSP-1096	B	<i>ATN1</i>	18/20		normal
5	FSP-1098	B	<i>ATN1</i>	19/20		normal
4	FSP-1100	B	<i>ATN1</i>	14/19		normal
4	FSP-1101	B	<i>ATN1</i>	19/20		normal
1	FSP-1102	B	<i>ATN1</i>	15/19		normal
3	FSP-1105	B	<i>ATN1</i>	17/20		normal
3	FSP-1107	B	<i>ATN1</i>	19/20		normal
4	FSP-1109	B	<i>ATN1</i>	18/20		normal
7	FSP-1110	B	<i>ATN1</i>	14/20		normal
7	FSP-1111	B	<i>ATN1</i>	12/19		normal
3	FSP-1113	B	<i>ATN1</i>	19/20		normal
1	FSP-1117	B	<i>ATN1</i>	18/19		normal
4	FSP-1120	B	<i>ATN1</i>	12/24		normal
1	FSP-1124	B	<i>ATN1</i>	19/19		normal
2	FSP-1124	B	<i>ATN1</i>	19/19		normal
22	FSP-1130	B	<i>ATN1</i>	18/19		normal
15	FSP-1131	B	<i>ATN1</i>	12/19		normal
3	FSP-1136	B	<i>ATN1</i>	14/19		normal
1	FSP-1145	B	<i>ATN1</i>	19/20		normal
4	FSP-1147	B	<i>ATN1</i>	12/19		normal
3	FSP-1148	B	<i>ATN1</i>	13/15		normal
1	FSP-1149	B	<i>ATN1</i>	19/21		normal
1	FSP-1151	B	<i>ATN1</i>	12/19		normal
4	FSP-1152	B	<i>ATN1</i>	22/23		normal
5	FSP-1153	B	<i>ATN1</i>	14/23		normal
1	FSP-1155	B	<i>ATN1</i>	12/12		normal
1	FSP-1157	B	<i>ATN1</i>	14/20		normal
1	FSP-1164	B	<i>ATN1</i>	19/20		normal
1	FSP-1171	B	<i>ATN1</i>	18/19		normal
3	FSP-1172	B	<i>ATN1</i>	19/19		normal
3	FSP-1174	B	<i>ATN1</i>	12/19		normal
1	FSP-1176	B	<i>ATN1</i>	19/23		normal
3	FSP-1178	B	<i>ATN1</i>	19/20		normal
1	FSP-1179	B	<i>ATN1</i>	18/19		normal
7	FSP-1181	B	<i>ATN1</i>	19/20		normal
1	FSP-1182	B	<i>ATN1</i>	19/19		normal
1	FSP-1185	B	<i>ATN1</i>	12/19		normal
1	FSP-1186	B	<i>ATN1</i>	12/21		normal
1	FSP-1187	B	<i>ATN1</i>	14/21		normal
1	FSP-1188	B	<i>ATN1</i>	19/19		normal
1	FSP-1189	B	<i>ATN1</i>	19/22		normal
1	FSP-1191	B	<i>ATN1</i>	18/19		normal
1	FSP-1193	B	<i>ATN1</i>	19/20		normal

1	FSP-1194	B	<i>ATN1</i>	14/20		normal
1	FSP-1288	B	<i>ATN1</i>	12/19		normal
2	FSP-1308	B	<i>ATN1</i>	15/20		normal
3	FSP-1308	B	<i>ATN1</i>	12/19		normal
1	FSP-1359	B	<i>ATN1</i>	19/20		normal
1	FSP-1426	B	<i>ATN1</i>	12/19		normal
1	FSP-1433	B	<i>ATN1</i>	14/24		normal
2	FSP-1452	B	<i>ATN1</i>	12/19		normal
1	FSP-1455	B	<i>ATN1</i>	14/19		normal
1	FSP-1458	B	<i>ATN1</i>	19/20		normal
1	FSP-1459	B	<i>ATN1</i>	12/19		normal
1	FSP-1467	B	<i>ATN1</i>	18/19		normal
1	FSP-1470	B	<i>ATN1</i>	16/17		normal
1	FSP-1480	B	<i>ATN1</i>	16/19		normal
1	FSP-1482	B	<i>ATN1</i>	12/19		normal
1	FSP-1499	B	<i>ATN1</i>	19/20		normal
1	FSP-1500	B	<i>ATN1</i>	19/20		normal
1	FSP-1506	B	<i>ATN1</i>	19/20		normal
1	FSP-1507	B	<i>ATN1</i>	14/20		normal
2	FSP-1507	B	<i>ATN1</i>	14/20		normal
1	FSP-1509	B	<i>ATN1</i>	19/20		normal
1	FSP-1510	B	<i>ATN1</i>	12/14		normal
1	FSP-1515	B	<i>ATN1</i>	20/23		normal
1	FSP-1529	B	<i>ATN1</i>	19/20		normal
1	FSP-1531	B	<i>ATN1</i>	19/20		normal
1	FSP-1537	B	<i>ATN1</i>	18/19		normal
1	FSP-1540	B	<i>ATN1</i>	14/21		normal
1	FSP-1544	B	<i>ATN1</i>	19/19		normal
1	FSP-1546	B	<i>ATN1</i>	19/19		normal
B0110	FSP-1547	B	<i>ATN1</i>	16/19		normal
1	FSP-1548	B	<i>ATN1</i>	14/20		normal
1	FSP-1558	B	<i>ATN1</i>	14/19		normal
1	FSP-1560	B	<i>ATN1</i>	18/19		normal
4	FSP-1568	B	<i>ATN1</i>	12/21		normal
5	FSP-1568	B	<i>ATN1</i>	20/21		normal
2	FSP-1569	B	<i>ATN1</i>	19/20		normal
B0022	FSP-1570	B	<i>ATN1</i>	14/19		normal
3	FSP-1573	B	<i>ATN1</i>	16/21		normal
5	FSP-1576	B	<i>ATN1</i>	12/15		normal
1	FSP-1579	B	<i>ATN1</i>	12/16		normal
6	FSP-1582	B	<i>ATN1</i>	12/20		normal
8	FSP-1582	B	<i>ATN1</i>	12/14		normal
3	FSP-1584	B	<i>ATN1</i>	19/20		normal
10	FSP-1585	B	<i>ATN1</i>	14/19		normal
1	FSP-1586	B	<i>ATN1</i>	12/19		normal

2	FSP-1588	B	ATN1	14/19		normal
4	FSP-1592	B	ATN1	14/19		normal
1	FSP-1593	B	ATN1	12/19		normal
3	FSP-1593	B	ATN1	19/20		normal
13	FSP-1594	B	ATN1	20/25		normal
6	FSP-1595	B	ATN1	18/19		normal
7	FSP-1600	B	ATN1	13/20		normal
6	FSP-1634	B	ATN1	12/17		normal
2	FSP-1636	B	ATN1	12/19		normal
3	FSP-1638	B	ATN1	19/22		normal
B0037	FSP-258	B	ATN1	14/23		normal
10	FSP-405	B	ATN1	19/20		normal
11	FSP-455	B	ATN1	19/22		normal
B0241	FSP-491	B	ATN1	14/20		normal
B0182	FSP-820	B	ATN1	19/19		normal
18	FSP-929	B	ATN1	15/19		normal
6	FSP-985	B	ATN1	18/19		normal
4	ITD-539	B	ATN1	19/19		normal
10	ITD-868	B	ATN1	12/12		normal
B0068	ITD-868	B	ATN1	12/12		normal
B0109	PED-1526	B	ATN1	19/19		normal
1057	SAL-105	B	ATN1	12/19		normal
1053	SAL-1053	B	ATN1	19/23		normal
1070	SAL-107	B	ATN1	19/19		normal
1082	SAL-108	B	ATN1	12/19		normal
1083	SAL-1083	B	ATN1	14/21		normal
1085	SAL-1085	B	ATN1	17/19		normal
1086	SAL-1086	B	ATN1	20/21		normal
1088	SAL-1088	B	ATN1	12/20		normal
1089	SAL-1089	B	ATN1	19/21		normal
1098	SAL-109	B	ATN1	19/20		normal
1090	SAL-1090	B	ATN1	14/20		normal
1	SAL-1100	B	ATN1	14/20		normal
3	SAL-1100	B	ATN1	19/20		normal
1101	SAL-1101	B	ATN1	12/20		normal
113	SAL-113	B	ATN1	12/19		normal
B0233	SAL-113	B	ATN1	12/19		normal
4	SAL-1603	B	ATN1	14/19		normal
B0117	SAL-1606	B	ATN1	17/20		normal
2	SAL-2806	B	ATN1	18/19		normal
18	SAL-315	B	ATN1	20/23		normal
22	SAL-315	B	ATN1	17/19		normal
24	SAL-315	B	ATN1	17/19		normal
26	SAL-315	B	ATN1	17/19		normal
32	SAL-315	B	ATN1	14/23		normal

38	SAL-315	B	<i>ATN1</i>	17/23		normal
40	SAL-315	B	<i>ATN1</i>	19/20		normal
B0169	SAL-315	B	<i>ATN1</i>	19/23		normal
646	SAL-646	B	<i>ATN1</i>	12/19		normal
650	SAL-650	B	<i>ATN1</i>	12/19		normal
654	SAL-654	B	<i>ATN1</i>	14/16		normal
713	SAL-713	B	<i>ATN1</i>	14/24		normal
789	SAL-789	B	<i>ATN1</i>	19/21		normal
4	SAL-866	B	<i>ATN1</i>	19/20		normal
7	SAL-866	B	<i>ATN1</i>	19/20		normal
872	SAL-872	B	<i>ATN1</i>	19/20		normal
874	SAL-874	B	<i>ATN1</i>	15/20		normal
878	SAL-878	B	<i>ATN1</i>	19/20		normal
881	SAL-881	B	<i>ATN1</i>	14/15		normal
883	SAL-883	B	<i>ATN1</i>	12/24		normal
887	SAL-887	B	<i>ATN1</i>	14/22		normal
891	SAL-891	B	<i>ATN1</i>	12/19		normal
892	SAL-892	B	<i>ATN1</i>	18/19		normal
893	SAL-893	B	<i>ATN1</i>	14/14		normal
900	SAL-900	B	<i>ATN1</i>	12/12		normal
901	SAL-901	B	<i>ATN1</i>	12/20		normal
902	SAL-902	B	<i>ATN1</i>	14/19		normal
905	SAL-905	B	<i>ATN1</i>	19/19		normal
906	SAL-906	B	<i>ATN1</i>	12/12		normal
1	SAL-919	B	<i>ATN1</i>	14/19		normal
2	SAL-919	B	<i>ATN1</i>	14/19		normal
919	SAL-919	B	<i>ATN1</i>	19/19		normal
1	AAD-1004	A	<i>ATXN1</i>	31/33	30/32	normal
9	AAD-1007	A	<i>ATXN1</i>	31/32	30/31	normal
1	AAD-1008	A	<i>ATXN1</i>	29/31	28/30	normal
1	AAD-1011	A	<i>ATXN1</i>	31/32	30/31	normal
2	AAD-1011	A	<i>ATXN1</i>	31/32	30/31	normal
1	AAD-1012	A	<i>ATXN1</i>	30/32	29/31	normal
1	AAD-1014	A	<i>ATXN1</i>	32/33	31/32	normal
2	AAD-1014	A	<i>ATXN1</i>	32/33	31/32	normal
1	AAD-1015	A	<i>ATXN1</i>	31/33	30/32	normal
1	AAD-1017	A	<i>ATXN1</i>	31/32	30/31	normal
2	AAD-1017	A	<i>ATXN1</i>	31/32	30/31	normal
3	AAD-1017	A	<i>ATXN1</i>	31/32	30/31	normal
4	AAD-1017	A	<i>ATXN1</i>	30/31	30/30	normal
1	AAD-1019	A	<i>ATXN1</i>	29/30	29/29	normal
11	AAD-1020	A	<i>ATXN1</i>	29/31	28/30	normal
1	AAD-1021	A	<i>ATXN1</i>	29/34	28/33	normal
2	AAD-1021	A	<i>ATXN1</i>	29/32	28/31	normal
1	AAD-1023	A	<i>ATXN1</i>	30/33	29/32	normal

1	AAD-1024	A	ATXN1	31/32	31/31	normal
1	AAD-1031	A	ATXN1	31/33	30/32	normal
1	AAD-1032	A	ATXN1	30/32	29/31	normal
1	AAD-1035	A	ATXN1	28/31	27/30	normal
1	AAD-1036	A	ATXN1	30/33	29/32	normal
2	AAD-1036	A	ATXN1	30/31	30/30	normal
3	AAD-1036	A	ATXN1	30/31	29/30	normal
4	AAD-1036	A	ATXN1	30/31	29/30	normal
1	AAD-1038	A	ATXN1	29/33	28/32	normal
1	AAD-1040	A	ATXN1	29/31	28/30	normal
1	AAD-1043	A	ATXN1	30/31	29/30	normal
1	AAD-1044	A	ATXN1	30/31	29/30	normal
1	AAD-1046	A	ATXN1	32/34	31/33	normal
1	AAD-1048	A	ATXN1	30/34	29/33	normal
1	AAD-1050	A	ATXN1	29/30	29/29	normal
3	AAD-1050	A	ATXN1	29/30	29/29	normal
4	AAD-1050	A	ATXN1	29/30	29/29	normal
1	AAD-1051	A	ATXN1	30/33	29/32	normal
2	AAD-1051	A	ATXN1	30/31	29/30	normal
1	AAD-1052	A	ATXN1	30/31	30/30	normal
1	AAD-1058	A	ATXN1	30/31	29/30	normal
1	AAD-1059	A	ATXN1	30/31	29/30	normal
1	AAD-1061	A	ATXN1	30/31	29/30	normal
1	AAD-1063	A	ATXN1	30/31	29/30	normal
2	AAD-1063	A	ATXN1	31/32	30/31	normal
1	AAD-1064	A	ATXN1	30/31	29/30	normal
2	AAD-1064	A	ATXN1	30/31	29/30	normal
1	AAD-1065	A	ATXN1	31/33	30/32	normal
2	AAD-1065	A	ATXN1	31/33	30/32	normal
3	AAD-1065	A	ATXN1	30/31	30/30	normal
1	AAD-1067	A	ATXN1	29/30	29/29	normal
1	AAD-1068	A	ATXN1	23/29	22/28	normal
1	AAD-1072	A	ATXN1	30/31	29/30	normal
1	AAD-1074	A	ATXN1	30/31	30/30	normal
1	AAD-1079	A	ATXN1	31/32	30/31	normal
1	AAD-1082	A	ATXN1	25/29	24/28	normal
1	AAD-1085	A	ATXN1	31/34	30/33	normal
1	AAD-1087	A	ATXN1	30/35	29/34	normal
1	AAD-1088	A	ATXN1	29/31	28/30	normal
1	AAD-1089	A	ATXN1	29/30	29/29	normal
1	AAD-1090	A	ATXN1	28/30	27/29	normal
1	AAD-1091	A	ATXN1	30/31	29/30	normal
1	AAD-1093	A	ATXN1	29/31	28/30	normal
1	AAD-1096	A	ATXN1	30/31	29/30	normal
1	AAD-1097	A	ATXN1	30/31	30/30	normal

1	AAD-1101	A	ATXN1	30/31	30/30	normal
1	AAD-1102	A	ATXN1	30/31	29/30	normal
1	AAD-1103	A	ATXN1	30/31	29/30	normal
1	AAD-1104	A	ATXN1	30/31	29/30	normal
1	AAD-1105	A	ATXN1	29/30	29/29	normal
1	AAD-1107	A	ATXN1	30/31	29/30	normal
1	AAD-1108	A	ATXN1	30/31	30/30	normal
1	AAD-1110	A	ATXN1	31/37	30/36	normal
1	AAD-1111	A	ATXN1	30/32	29/31	normal
1	AAD-1112	A	ATXN1	29/30	29/29	normal
2	AAD-1112	A	ATXN1	29/30	29/29	normal
1	AAD-1114	A	ATXN1	30/35	29/34	normal
1	AAD-1115	A	ATXN1	29/30	29/29	normal
1	AAD-1119	A	ATXN1	30/31	29/30	normal
1	AAD-1121	A	ATXN1	32/33	31/32	normal
2	AAD-1121	A	ATXN1	31/32	30/31	normal
1	AAD-1123	A	ATXN1	29/30	29/29	normal
1	AAD-1124	A	ATXN1	30/31	29/30	normal
1	AAD-1125	A	ATXN1	30/31	29/30	normal
1	AAD-1127	A	ATXN1	29/30	29/29	normal
1	AAD-1130	A	ATXN1	30/31	29/30	normal
1	AAD-1131	A	ATXN1	27/30	26/29	normal
1	AAD-1133	A	ATXN1	29/31	28/30	normal
1	AAD-1148	A	ATXN1	28/30	27/29	normal
2	AAD-1148	A	ATXN1	29/30	29/29	normal
4	AAD-1148	A	ATXN1	30/31	29/30	normal
1	AAD-1150	A	ATXN1	23/31	22/30	normal
1	AAD-1154	A	ATXN1	31/33	30/32	normal
1	AAD-1155	A	ATXN1	31/32	30/31	normal
1	AAD-1156	A	ATXN1	30/31	29/30	normal
1	AAD-1158	A	ATXN1	30/31	30/30	normal
1	AAD-1160	A	ATXN1	30/31	30/30	normal
1	AAD-1161	A	ATXN1	30/37	29/36	normal
1	AAD-1163	A	ATXN1	29/30	29/29	normal
1	AAD-1164	A	ATXN1	31/32	30/31	normal
1	AAD-1165	A	ATXN1	27/36	26/35	normal
1	AAD-1171	A	ATXN1	28/29	28/28	normal
1	AAD-1172	A	ATXN1	30/31	29/30	normal
1	AAD-1173	A	ATXN1	30/32	29/31	normal
1	AAD-1175	A	ATXN1	29/30	29/29	normal
1	AAD-1176	A	ATXN1	30/31	30/30	normal
1	AAD-1178	A	ATXN1	29/30	29/29	normal
1	AAD-1179	A	ATXN1	29/30	29/29	normal
2	AAD-1179	A	ATXN1	30/32	29/31	normal
1	AAD-1181	A	ATXN1	31/34	30/33	normal

1	AAD-1184	A	ATXN1	30/31	29/30	normal
1	AAD-1185	A	ATXN1	28/29	28/28	normal
1	AAD-1190	A	ATXN1	30/31	29/30	normal
1	AAD-1191	A	ATXN1	30/31	29/30	normal
1	AAD-1192	A	ATXN1	30/31	29/30	normal
1	AAD-1194	A	ATXN1	30/33	29/32	normal
1	AAD-1195	A	ATXN1	29/30	29/29	normal
1	AAD-1198	A	ATXN1	30/31	30/30	normal
1	AAD-1201	A	ATXN1	30/31	29/30	normal
1	AAD-1205	A	ATXN1	30/33	29/32	normal
1	AAD-1206	A	ATXN1	30/31	30/30	normal
1	AAD-1220	A	ATXN1	31/32	30/31	normal
1	AAD-1221	A	ATXN1	30/31	30/30	normal
3	AAD-1247	A	ATXN1	30/32	29/31	normal
10	AAD-1251	A	ATXN1	29/31	28/30	normal
3	AAD-1267	A	ATXN1	30/31	30/30	normal
2	AAD-1269	A	ATXN1	30/31	29/30	normal
4	AAD-1269	A	ATXN1	30/31	30/30	normal
5	AAD-1271	A	ATXN1	30/31	30/30	normal
13	AAD-1280	A	ATXN1	33/34	32/33	normal
4	AAD-1285	A	ATXN1	30/31	29/30	normal
3	AAD-1288	A	ATXN1	30/31	29/30	normal
2	AAD-1291	A	ATXN1	30/31	29/30	normal
3	AAD-1294	A	ATXN1	30/31	29/30	normal
3	AAD-1296	A	ATXN1	30/31	29/30	normal
3	AAD-1299	A	ATXN1	30/37	29/36	normal
2	AAD-1300	A	ATXN1	29/30	29/29	normal
8	AAD-1302	A	ATXN1	32/37	31/36	normal
1	AAD-1303	A	ATXN1	30/31	29/30	normal
1	AAD-1304	A	ATXN1	30/31	29/30	normal
2	AAD-1304	A	ATXN1	30/31	30/30	normal
5	AAD-1306	A	ATXN1	29/30	29/29	normal
5	AAD-1309	A	ATXN1	30/31	30/30	normal
6	AAD-1310	A	ATXN1	29/30	29/29	normal
4	AAD-1316	A	ATXN1	30/31	29/30	normal
2	AAD-1320	A	ATXN1	31/33	30/32	normal
1	AAD-1323	A	ATXN1	30/31	29/30	normal
3	AAD-1324	A	ATXN1	30/31	30/30	normal
6	AAD-1325	A	ATXN1	32/33	31/32	normal
1	AAD-1326	A	ATXN1	31/33	30/32	normal
2	AAD-1326	A	ATXN1	30/34	29/33	normal
5	AAD-1328	A	ATXN1	30/37	29/36	normal
2	AAD-1329	A	ATXN1	31/32	31/31	normal
10	AAD-1330	A	ATXN1	29/30	29/29	normal
6	AAD-1332	A	ATXN1	30/31	30/30	normal

3	AAD-1333	A	ATXN1	30/31	29/30	normal
7	AAD-1335	A	ATXN1	30/35	29/34	normal
2	AAD-1336	A	ATXN1	30/33	29/32	normal
2	AAD-1340	A	ATXN1	30/33	29/32	normal
7	AAD-1341	A	ATXN1	30/32	29/31	normal
2	AAD-1342	A	ATXN1	31/32	30/31	normal
5	AAD-1347	A	ATXN1	29/30	29/29	normal
4	AAD-1349	A	ATXN1	30/33	29/32	normal
3	AAD-1350	A	ATXN1	33/36	32/35	normal
4	AAD-1351	A	ATXN1	32/33	31/32	normal
3	AAD-1352	A	ATXN1	30/31	29/30	normal
7	AAD-1352	A	ATXN1	31/32	31/31	normal
1	AAD-1353	A	ATXN1	28/29	27/28	normal
1	AAD-1354	A	ATXN1	31/33	30/32	normal
3	AAD-1355	A	ATXN1	30/31	29/30	normal
5	AAD-1356	A	ATXN1	30/32	29/31	normal
7	AAD-1358	A	ATXN1	30/31	29/30	normal
4	AAD-1359	A	ATXN1	30/32	29/31	normal
5	AAD-1360	A	ATXN1	31/32	30/31	normal
13	AAD-1362	A	ATXN1	30/31	29/30	normal
4	AAD-1363	A	ATXN1	31/32	31/31	normal
5	AAD-1364	A	ATXN1	29/30	29/29	normal
1	AAD-1367	A	ATXN1	30/32	29/31	normal
3	AAD-1371	A	ATXN1	29/30	29/29	normal
1	AAD-1378	A	ATXN1	30/31	30/30	normal
1	AAD-1379	A	ATXN1	30/31	29/30	normal
1	AAD-1380	A	ATXN1	30/31	29/30	normal
1	AAD-1383	A	ATXN1	31/32	30/31	normal
1	AAD-1385	A	ATXN1	30/31	30/30	normal
7	AAD-1386	A	ATXN1	29/32	28/31	normal
8	AAD-1387	A	ATXN1	31/32	30/31	normal
1	AAD-1398	A	ATXN1	29/31	28/30	normal
3	AAD-1398	A	ATXN1	29/31	28/30	normal
346	AAD-1398	A	ATXN1	29/31	28/30	normal
1	AAD-1407	A	ATXN1	30/31	30/30	normal
1	AAD-1410	A	ATXN1	30/32	29/31	normal
9	AAD-386	A	ATXN1	30/31	30/30	normal
7	AAD-481	A	ATXN1	30/31	30/30	normal
10	AAD-481	A	ATXN1	31/33	30/32	normal
3	AAD-723	A	ATXN1	30/31	29/30	normal
13	AAD-723	A	ATXN1	30/34	29/33	normal
7	AAD-726	A	ATXN1	32/33	31/32	normal
10	AAD-729	A	ATXN1	29/30	28/29	normal
5	AAD-736	A	ATXN1	30/34	29/33	normal
3	AAD-928	A	ATXN1	29/30	29/29	normal

20	AAD-928	A	ATXN1	31/37	30/36	normal
8	AAD-935	A	ATXN1	30/36	29/35	normal
1	AAD-952	A	ATXN1	30/37	29/36	normal
1	AAD-958	A	ATXN1	30/31	29/30	normal
7	AAD-960	A	ATXN1	30/32	29/31	normal
20	AAD-960	A	ATXN1	30/32	29/31	normal
1	AAD-961	A	ATXN1	29/30	28/29	normal
2	AAD-961	A	ATXN1	29/31	28/30	normal
1	AAD-963	A	ATXN1	29/30	29/29	normal
1	AAD-966	A	ATXN1	31/32	30/31	normal
6	AAD-967	A	ATXN1	29/30	29/29	normal
8	AAD-967	A	ATXN1	30/36	29/35	normal
1	AAD-968	A	ATXN1	30/33	29/32	normal
1	AAD-972	A	ATXN1	33/34	32/33	normal
2	AAD-972	A	ATXN1	30/31	30/30	normal
4	AAD-973	A	ATXN1	30/31	30/30	normal
1	AAD-976	A	ATXN1	31/32	30/31	normal
2	AAD-976	A	ATXN1	29/33	28/32	normal
1	AAD-978	A	ATXN1	31/34	30/33	normal
6	AAD-979	A	ATXN1	31/37	30/36	normal
5	AAD-997	A	ATXN1	30/31	30/30	normal
6	AAD-997	A	ATXN1	30/31	29/30	normal
8	AAD-997	A	ATXN1	30/31	29/30	normal
1	AAD-999	A	ATXN1	30/31	30/30	normal
7	AAR-319	A	ATXN1	30/30	29/29	normal
1	AAR-549	A	ATXN1	29/30	29/29	normal
3	AAR-875	A	ATXN1	28/32	27/31	normal
3	AAR-880	A	ATXN1	30/31	29/30	normal
5	AAR-886	A	ATXN1	30/31	29/30	normal
3	AAR-887	A	ATXN1	29/30	28/29	normal
1	AAR-895	A	ATXN1	30/33	29/32	normal
24	FPD-1051	A	ATXN1	30/31	30/30	normal
1	FSP-1177	A	ATXN1	31/32	30/31	normal
5	FSP-1304	A	ATXN1	30/37	29/36	normal
1	FSP-1305	A	ATXN1	30/31	29/30	normal
2	FSP-1305	A	ATXN1	30/31	29/30	normal
1	FSP-1307	A	ATXN1	30/31	29/30	normal
7	FSP-1308	A	ATXN1	27/30	26/29	normal
11	FSP-1308	A	ATXN1	30/31	29/30	normal
3	FSP-403	A	ATXN1	30/31	30/30	normal
25	SAL-025	A	ATXN1	30/31	29/30	normal
1069	SAL-1069	A	ATXN1	31/33	30/32	normal
167	SAL-167	A	ATXN1	30/31	30/30	normal
4	SAL-307	A	ATXN1	31/34	30/33	normal
5	SAL-307	A	ATXN1	30/34	29/33	normal

7	SAL-307	A	ATXN1	31/34	30/33	normal
780	SAL-780	A	ATXN1	31/32	31/31	normal
904	SAL-904	A	ATXN1	30/31	29/30	normal
995	SAL-995	A	ATXN1	30/31	29/30	normal
13	AAD-1020	B	ATXN1	30/31		normal
1	AAD-1045	B	ATXN1	31/33		normal
1	AAD-1159	B	ATXN1	31/33		normal
B0152	AAD-1213	B	ATXN1	30/31		normal
B0153	AAD-1213	B	ATXN1	30/31		normal
9	AAD-1249	B	ATXN1	33/47	30/45	pathogenic
1	AAD-1250	B	ATXN1	31/44	28/40	pathogenic
B0254	AAD-1261	B	ATXN1	30/37		normal
1	AAD-1274	B	ATXN1	28/30		normal
1	AAD-1389	B	ATXN1	30/33		normal
10	AAD-139	B	ATXN1	30/33		normal
B0006	AAD-1397	B	ATXN1	30/31		normal
3	AAD-1399	B	ATXN1	30/31		normal
2	AAD-1421	B	ATXN1	30/31		normal
9	AAD-369	B	ATXN1	31/32		normal
3	AAD-377	B	ATXN1	28/29		normal
3	AAD-533	B	ATXN1	30/33		normal
6	AAD-566	B	ATXN1	30/34		normal
9	AAD-566	B	ATXN1	30/31		normal
10	AAD-566	B	ATXN1	31/33		normal
7	AAD-569	B	ATXN1	30/31		normal
5	AAD-635	B	ATXN1	30/31		normal
10	AAD-683	B	ATXN1	30/31		normal
12	AAD-683	B	ATXN1	30/31		normal
14	AAD-683	B	ATXN1	30/31		normal
15	AAD-683	B	ATXN1	30/31		normal
16	AAD-683	B	ATXN1	30/31		normal
5	AAD-743	B	ATXN1	30/31		normal
7	AAD-743	B	ATXN1	29/31		normal
B0080	AAD-743	B	ATXN1	30/31		normal
7	AAD-748	B	ATXN1	30/31		normal
1	AAD-834	B	ATXN1	30/32		normal
8	AAD-861	B	ATXN1	30/31		normal
4	AAD-891	B	ATXN1	30/31		normal
23	AAD-908	B	ATXN1	30/33		normal
B0079	AAD-908	B	ATXN1	29/30		normal
B0083	AAD-949	B	ATXN1	29/30		normal
8	AAD-971	B	ATXN1	29/30		normal
3	AAR-242	B	ATXN1	31/33		normal
5	AAR-500	B	ATXN1	29/30		normal
16	AAR-512	B	ATXN1	29/30		normal

1	AAR-676	B	ATXN1	30/33		normal
1	AAR-740	B	ATXN1	30/31		normal
B0149	AAR-860	B	ATXN1	30/31		normal
B0229	AAR-895	B	ATXN1	30/33		normal
10	AAR-912	B	ATXN1	29/32		normal
B0194	AGE-028	B	ATXN1	19/27		normal
B0039	B0039	B	ATXN1	30/31		normal
B0040	B0040	B	ATXN1	27/31		normal
B0047	B0047	B	ATXN1	31/33		normal
B0071	B0071	B	ATXN1	30/31		normal
B0126	B0126	B	ATXN1	30/31		normal
B0146	B0146	B	ATXN1	31/35		normal
B0164	B0164	B	ATXN1	30/31		normal
B0168	B0168	B	ATXN1	31/34		normal
B0171	B0171	B	ATXN1	31/32		normal
B0198	B0198	B	ATXN1	30/33		normal
B0199	B0199	B	ATXN1	29/30		normal
B0215	B0215	B	ATXN1	29/30		normal
B0244	B0244	B	ATXN1	29/30		normal
B0247	B0247	B	ATXN1	30/31		normal
B0250	B0250	B	ATXN1	30/31		normal
B0253	B0253	B	ATXN1	30/31		normal
B0278	B0278	B	ATXN1	30/35		normal
1	CMT-234	B	ATXN1	31/33		normal
4	CMT-234	B	ATXN1	30/31		normal
16	CMT-234	B	ATXN1	30/31		normal
1	DFT-315	B	ATXN1	29/30		normal
9	DFT-326	B	ATXN1	31/36		normal
18	ENE-013	B	ATXN1	31/34		normal
9	FSP-006	B	ATXN1	29/30		normal
11	FSP-006	B	ATXN1	30/33		normal
13	FSP-006	B	ATXN1	30/31		normal
14	FSP-006	B	ATXN1	30/37		normal
20	FSP-056	B	ATXN1	28/30		normal
21	FSP-056	B	ATXN1	30/38		normal
1	FSP-078	B	ATXN1	30/31		normal
13	FSP-088	B	ATXN1	31/37		normal
1	FSP-1009	B	ATXN1	30/31		normal
4	FSP-1044	B	ATXN1	30/31		normal
1	FSP-1048	B	ATXN1	30/32		normal
5	FSP-1057	B	ATXN1	31/32		normal
7	FSP-1057	B	ATXN1	31/32		normal
8	FSP-1059	B	ATXN1	28/33		normal
1	FSP-1060	B	ATXN1	30/31		normal
4	FSP-1062	B	ATXN1	30/31		normal

1	FSP-1063	B	ATXN1	29/31		normal
5	FSP-1064	B	ATXN1	30/31		normal
6	FSP-1065	B	ATXN1	30/34		normal
6	FSP-1066	B	ATXN1	30/33		normal
3	FSP-1067	B	ATXN1	29/30		normal
12	FSP-1070	B	ATXN1	29/30		normal
3	FSP-1071	B	ATXN1	29/32		normal
11	FSP-1072	B	ATXN1	29/30		normal
1	FSP-1073	B	ATXN1	32/33		normal
10	FSP-1073	B	ATXN1	31/33		normal
1	FSP-1076	B	ATXN1	30/31		normal
9	FSP-1081	B	ATXN1	30/31		normal
3	FSP-1096	B	ATXN1	30/31		normal
5	FSP-1098	B	ATXN1	30/31		normal
4	FSP-1100	B	ATXN1	30/32		normal
4	FSP-1101	B	ATXN1	30/31		normal
1	FSP-1102	B	ATXN1	30/31		normal
3	FSP-1105	B	ATXN1	29/30		normal
3	FSP-1107	B	ATXN1	30/31		normal
4	FSP-1109	B	ATXN1	30/36		normal
7	FSP-1110	B	ATXN1	29/30		normal
7	FSP-1111	B	ATXN1	30/31		normal
3	FSP-1113	B	ATXN1	30/31		normal
1	FSP-1117	B	ATXN1	30/31		normal
4	FSP-1120	B	ATXN1	27/30		normal
1	FSP-1124	B	ATXN1	30/31		normal
2	FSP-1124	B	ATXN1	30/31		normal
22	FSP-1130	B	ATXN1	30/33		normal
15	FSP-1131	B	ATXN1	30/31		normal
3	FSP-1136	B	ATXN1	31/32		normal
1	FSP-1145	B	ATXN1	30/31		normal
4	FSP-1147	B	ATXN1	29/30		normal
3	FSP-1148	B	ATXN1	30/31		normal
1	FSP-1149	B	ATXN1	29/30		normal
1	FSP-1151	B	ATXN1	31/37		normal
4	FSP-1152	B	ATXN1	30/31		normal
5	FSP-1153	B	ATXN1	30/31		normal
1	FSP-1155	B	ATXN1	31/33		normal
1	FSP-1157	B	ATXN1	31/32		normal
1	FSP-1164	B	ATXN1	30/31		normal
1	FSP-1171	B	ATXN1	31/33		normal
3	FSP-1172	B	ATXN1	30/31		normal
3	FSP-1174	B	ATXN1	30/31		normal
1	FSP-1176	B	ATXN1	29/30		normal
3	FSP-1178	B	ATXN1	31/33		normal

1	FSP-1179	B	ATXN1	32/33		normal
7	FSP-1181	B	ATXN1	30/31		normal
1	FSP-1182	B	ATXN1	32/34		normal
1	FSP-1185	B	ATXN1	30/31		normal
1	FSP-1186	B	ATXN1	32/33		normal
1	FSP-1187	B	ATXN1	29/30		normal
1	FSP-1188	B	ATXN1	30/31		normal
1	FSP-1189	B	ATXN1	30/31		normal
1	FSP-1191	B	ATXN1	29/30		normal
1	FSP-1193	B	ATXN1	29/31		normal
1	FSP-1194	B	ATXN1	33/34		normal
1	FSP-1288	B	ATXN1	31/33		normal
2	FSP-1308	B	ATXN1	27/31		normal
3	FSP-1308	B	ATXN1	30/31		normal
1	FSP-1359	B	ATXN1	31/37		normal
1	FSP-1426	B	ATXN1	30/31		normal
1	FSP-1433	B	ATXN1	29/34		normal
2	FSP-1452	B	ATXN1	31/31		normal
1	FSP-1455	B	ATXN1	30/32		normal
1	FSP-1458	B	ATXN1	29/30		normal
1	FSP-1459	B	ATXN1	30/31		normal
1	FSP-1467	B	ATXN1	31/33		normal
1	FSP-1470	B	ATXN1	28/31		normal
1	FSP-1480	B	ATXN1	30/31		normal
1	FSP-1482	B	ATXN1	31/37		normal
1	FSP-1499	B	ATXN1	29/30		normal
1	FSP-1500	B	ATXN1	30/31		normal
1	FSP-1506	B	ATXN1	29/30		normal
1	FSP-1507	B	ATXN1	30/31		normal
2	FSP-1507	B	ATXN1	31/34		normal
1	FSP-1509	B	ATXN1	31/31		normal
1	FSP-1510	B	ATXN1	30/31		normal
1	FSP-1515	B	ATXN1	27/31		normal
1	FSP-1529	B	ATXN1	30/32		normal
1	FSP-1531	B	ATXN1	28/30		normal
1	FSP-1537	B	ATXN1	29/31		normal
1	FSP-1540	B	ATXN1	31/34		normal
1	FSP-1544	B	ATXN1	30/31		normal
1	FSP-1546	B	ATXN1	29/30		normal
B0110	FSP-1547	B	ATXN1	30/31		normal
1	FSP-1548	B	ATXN1	31/33		normal
1	FSP-1558	B	ATXN1	31/32		normal
1	FSP-1560	B	ATXN1	30/32		normal
4	FSP-1568	B	ATXN1	29/31		normal
5	FSP-1568	B	ATXN1	30/31		normal

2	FSP-1569	B	ATXN1	29/30		normal
B0022	FSP-1570	B	ATXN1	28/34		normal
3	FSP-1573	B	ATXN1	29/30		normal
5	FSP-1576	B	ATXN1	31/33		normal
1	FSP-1579	B	ATXN1	30/31		normal
6	FSP-1582	B	ATXN1	30/31		normal
8	FSP-1582	B	ATXN1	30/31		normal
3	FSP-1584	B	ATXN1	30/31		normal
10	FSP-1585	B	ATXN1	29/30		normal
1	FSP-1586	B	ATXN1	29/30		normal
2	FSP-1588	B	ATXN1	30/31		normal
4	FSP-1592	B	ATXN1	30/31		normal
1	FSP-1593	B	ATXN1	30/31		normal
3	FSP-1593	B	ATXN1	30/31		normal
13	FSP-1594	B	ATXN1	30/34		normal
6	FSP-1595	B	ATXN1	30/31		normal
7	FSP-1600	B	ATXN1	30/31		normal
6	FSP-1634	B	ATXN1	32/33		normal
2	FSP-1636	B	ATXN1	29/30		normal
3	FSP-1638	B	ATXN1	30/31		normal
B0037	FSP-258	B	ATXN1	31/32		normal
10	FSP-405	B	ATXN1	31/32		normal
11	FSP-455	B	ATXN1	31/34		normal
B0241	FSP-491	B	ATXN1	30/33		normal
B0182	FSP-820	B	ATXN1	29/30		normal
18	FSP-929	B	ATXN1	31/33		normal
6	FSP-985	B	ATXN1	30/31		normal
4	ITD-539	B	ATXN1	29/31		normal
10	ITD-868	B	ATXN1	30/34		normal
B0068	ITD-868	B	ATXN1	30/34		normal
B0109	PED-1526	B	ATXN1	30/33		normal
1057	SAL-105	B	ATXN1	30/31		normal
1053	SAL-1053	B	ATXN1	30/31		normal
1070	SAL-107	B	ATXN1	31/35		normal
1082	SAL-108	B	ATXN1	31/37		normal
1083	SAL-1083	B	ATXN1	29/30		normal
1085	SAL-1085	B	ATXN1	30/31		normal
1086	SAL-1086	B	ATXN1	30/31		normal
1088	SAL-1088	B	ATXN1	29/37		normal
1089	SAL-1089	B	ATXN1	31/34		normal
1098	SAL-109	B	ATXN1	30/31		normal
1090	SAL-1090	B	ATXN1	30/31		normal
1	SAL-1100	B	ATXN1	30/35		normal
3	SAL-1100	B	ATXN1	30/35		normal
1101	SAL-1101	B	ATXN1	30/31		normal

113	SAL-113	B	ATXN1	30/33		normal
B0233	SAL-113	B	ATXN1	30/31		normal
4	SAL-1603	B	ATXN1	30/31		normal
B0117	SAL-1606	B	ATXN1	30/31		normal
2	SAL-2806	B	ATXN1	29/30		normal
18	SAL-315	B	ATXN1	30/31		normal
22	SAL-315	B	ATXN1	29/30		normal
24	SAL-315	B	ATXN1	29/30		normal
26	SAL-315	B	ATXN1	30/31		normal
32	SAL-315	B	ATXN1	30/31		normal
38	SAL-315	B	ATXN1	30/37		normal
40	SAL-315	B	ATXN1	29/30		normal
B0169	SAL-315	B	ATXN1	30/31		normal
646	SAL-646	B	ATXN1	31/32		normal
650	SAL-650	B	ATXN1	31/33		normal
654	SAL-654	B	ATXN1	17/29		normal
713	SAL-713	B	ATXN1	30/31		normal
789	SAL-789	B	ATXN1	30/31		normal
4	SAL-866	B	ATXN1	31/34		normal
7	SAL-866	B	ATXN1	31/32		normal
872	SAL-872	B	ATXN1	30/31		normal
874	SAL-874	B	ATXN1	30/31		normal
878	SAL-878	B	ATXN1	31/33		normal
881	SAL-881	B	ATXN1	30/31		normal
883	SAL-883	B	ATXN1	30/31		normal
887	SAL-887	B	ATXN1	30/37		normal
891	SAL-891	B	ATXN1	28/31		normal
892	SAL-892	B	ATXN1	32/37		normal
893	SAL-893	B	ATXN1	30/33		normal
900	SAL-900	B	ATXN1	30/33		normal
901	SAL-901	B	ATXN1	30/34		normal
902	SAL-902	B	ATXN1	30/38		normal
905	SAL-905	B	ATXN1	30/31		normal
906	SAL-906	B	ATXN1	30/37		normal
1	SAL-919	B	ATXN1	32/34		normal
2	SAL-919	B	ATXN1	32/33		normal
919	SAL-919	B	ATXN1	31/33		normal
1	AAD-1004	A	ATXN2	22/22	22/22	normal
9	AAD-1007	A	ATXN2	21/22	22/22	normal
1	AAD-1008	A	ATXN2	22/22	22/22	normal
1	AAD-1011	A	ATXN2	22/22	22/22	normal
2	AAD-1011	A	ATXN2	22/22	22/22	normal
1	AAD-1012	A	ATXN2	22/23	22/23	normal
1	AAD-1014	A	ATXN2	22/23	22/23	normal
2	AAD-1014	A	ATXN2	21/22	22/22	normal

1	AAD-1015	A	ATXN2	21/22	22/22	normal
1	AAD-1017	A	ATXN2	22/23	22/23	normal
2	AAD-1017	A	ATXN2	22/23	22/23	normal
3	AAD-1017	A	ATXN2	22/23	22/23	normal
4	AAD-1017	A	ATXN2	22/22	22/22	normal
1	AAD-1019	A	ATXN2	22/22	22/22	normal
11	AAD-1020	A	ATXN2	21/22	22/22	normal
1	AAD-1021	A	ATXN2	21/22	22/22	normal
2	AAD-1021	A	ATXN2	22/22	22/22	normal
1	AAD-1023	A	ATXN2	22/22	22/22	normal
1	AAD-1024	A	ATXN2	22/22	22/22	normal
1	AAD-1031	A	ATXN2	17/22	17/22	normal
1	AAD-1032	A	ATXN2	21/22	22/22	normal
1	AAD-1035	A	ATXN2	22/22	22/22	normal
1	AAD-1036	A	ATXN2	22/22	22/22	normal
2	AAD-1036	A	ATXN2	22/22	22/22	normal
3	AAD-1036	A	ATXN2	21/22	22/22	normal
4	AAD-1036	A	ATXN2	22/22	22/22	normal
1	AAD-1038	A	ATXN2	22/22	22/22	normal
1	AAD-1040	A	ATXN2	22/27	22/27	normal
1	AAD-1043	A	ATXN2	21/22	22/22	normal
1	AAD-1044	A	ATXN2	22/23	22/23	normal
1	AAD-1046	A	ATXN2	22/22	22/22	normal
1	AAD-1048	A	ATXN2	22/22	22/22	normal
1	AAD-1050	A	ATXN2	22/22	22/22	normal
3	AAD-1050	A	ATXN2	22/28	22/28	normal
4	AAD-1050	A	ATXN2	21/22	22/22	normal
1	AAD-1051	A	ATXN2	22/23	22/23	normal
2	AAD-1051	A	ATXN2	22/23	22/23	normal
1	AAD-1052	A	ATXN2	22/32	22/33	normal
1	AAD-1058	A	ATXN2	22/22	22/22	normal
1	AAD-1059	A	ATXN2	22/23	22/23	normal
1	AAD-1061	A	ATXN2	22/22	22/22	normal
1	AAD-1063	A	ATXN2	22/22	22/22	normal
2	AAD-1063	A	ATXN2	22/22	22/22	normal
1	AAD-1064	A	ATXN2	21/22	22/22	normal
2	AAD-1064	A	ATXN2	22/22	22/22	normal
1	AAD-1065	A	ATXN2	22/23	22/23	normal
2	AAD-1065	A	ATXN2	22/22	22/22	normal
3	AAD-1065	A	ATXN2	22/23	22/23	normal
1	AAD-1067	A	ATXN2	21/22	22/22	normal
1	AAD-1068	A	ATXN2	22/22	22/22	normal
1	AAD-1072	A	ATXN2	22/28	22/28	normal
1	AAD-1074	A	ATXN2	22/23	22/23	normal
1	AAD-1079	A	ATXN2	21/22	22/22	normal

1	AAD-1082	A	ATXN2	21/22	22/22	normal
1	AAD-1085	A	ATXN2	22/27	22/27	normal
1	AAD-1087	A	ATXN2	21/22	22/22	normal
1	AAD-1088	A	ATXN2	22/23	22/23	normal
1	AAD-1089	A	ATXN2	22/22	22/22	normal
1	AAD-1090	A	ATXN2	21/22	22/22	normal
1	AAD-1091	A	ATXN2	22/22	22/22	normal
1	AAD-1093	A	ATXN2	21/22	22/22	normal
1	AAD-1096	A	ATXN2	22/22	22/22	normal
1	AAD-1097	A	ATXN2	22/22	22/22	normal
1	AAD-1101	A	ATXN2	22/23	22/23	normal
1	AAD-1102	A	ATXN2	21/22	22/22	normal
1	AAD-1103	A	ATXN2	21/22	22/22	normal
1	AAD-1104	A	ATXN2	21/22	22/22	normal
1	AAD-1105	A	ATXN2	22/22	22/22	normal
1	AAD-1107	A	ATXN2	22/22	22/22	normal
1	AAD-1108	A	ATXN2	21/22	22/22	normal
1	AAD-1110	A	ATXN2	22/22	22/22	normal
1	AAD-1111	A	ATXN2	22/23	22/23	normal
1	AAD-1112	A	ATXN2	22/22	22/22	normal
2	AAD-1112	A	ATXN2	22/27	22/27	normal
1	AAD-1114	A	ATXN2	22/23	22/23	normal
1	AAD-1115	A	ATXN2	22/22	22/22	normal
1	AAD-1119	A	ATXN2	21/22	22/22	normal
1	AAD-1121	A	ATXN2	22/22	22/22	normal
2	AAD-1121	A	ATXN2	21/22	22/22	normal
1	AAD-1123	A	ATXN2	21/22	22/22	normal
1	AAD-1124	A	ATXN2	22/22	22/22	normal
1	AAD-1125	A	ATXN2	22/22	22/22	normal
1	AAD-1127	A	ATXN2	22/22	22/22	normal
1	AAD-1130	A	ATXN2	21/22	22/22	normal
1	AAD-1131	A	ATXN2	22/40	22/39	pathogenic
1	AAD-1133	A	ATXN2	22/22	22/22	normal
1	AAD-1148	A	ATXN2	22/22	22/22	normal
2	AAD-1148	A	ATXN2	17/22	17/22	normal
4	AAD-1148	A	ATXN2	22/22	22/22	normal
1	AAD-1150	A	ATXN2	22/22	22/22	normal
1	AAD-1154	A	ATXN2	22/22	22/22	normal
1	AAD-1155	A	ATXN2	22/22	22/22	normal
1	AAD-1156	A	ATXN2	22/22	22/22	normal
1	AAD-1158	A	ATXN2	22/27	22/27	normal
1	AAD-1160	A	ATXN2	21/22	22/22	normal
1	AAD-1161	A	ATXN2	21/22	22/22	normal
1	AAD-1163	A	ATXN2	22/27	22/27	normal
1	AAD-1164	A	ATXN2	22/22	22/22	normal

1	AAD-1165	A	ATXN2	22/22	22/22	normal
1	AAD-1171	A	ATXN2	21/22	22/22	normal
1	AAD-1172	A	ATXN2	21/22	22/22	normal
1	AAD-1173	A	ATXN2	22/24	22/24	normal
1	AAD-1175	A	ATXN2	22/23	23/23	normal
1	AAD-1176	A	ATXN2	22/22	22/22	normal
1	AAD-1178	A	ATXN2	22/22	22/22	normal
1	AAD-1179	A	ATXN2	21/22	22/22	normal
2	AAD-1179	A	ATXN2	22/22	22/22	normal
1	AAD-1181	A	ATXN2	21/22	22/22	normal
1	AAD-1184	A	ATXN2	22/22	22/22	normal
1	AAD-1185	A	ATXN2	22/22	22/22	normal
1	AAD-1190	A	ATXN2	22/22	22/22	normal
1	AAD-1191	A	ATXN2	21/22	22/22	normal
1	AAD-1192	A	ATXN2	22/23	22/23	normal
1	AAD-1194	A	ATXN2	22/22	22/22	normal
1	AAD-1195	A	ATXN2	22/22	22/22	normal
1	AAD-1198	A	ATXN2	21/22	22/22	normal
1	AAD-1201	A	ATXN2	22/22	22/22	normal
1	AAD-1205	A	ATXN2	21/22	22/22	normal
1	AAD-1206	A	ATXN2	22/23	22/23	normal
1	AAD-1220	A	ATXN2	22/41	22/41	pathogenic
1	AAD-1221	A	ATXN2	21/22	22/22	normal
3	AAD-1247	A	ATXN2	22/22	22/22	normal
10	AAD-1251	A	ATXN2	21/22	22/22	normal
3	AAD-1267	A	ATXN2	22/23	22/23	normal
2	AAD-1269	A	ATXN2	21/22	22/22	normal
4	AAD-1269	A	ATXN2	22/24	22/24	normal
5	AAD-1271	A	ATXN2	22/22	22/22	normal
13	AAD-1280	A	ATXN2	22/22	22/22	normal
4	AAD-1285	A	ATXN2	22/22	22/22	normal
3	AAD-1288	A	ATXN2	22/23	22/23	normal
2	AAD-1291	A	ATXN2	22/22	22/22	normal
3	AAD-1294	A	ATXN2	22/22	22/22	normal
3	AAD-1296	A	ATXN2	19/22	19/22	normal
3	AAD-1299	A	ATXN2	22/23	22/23	normal
2	AAD-1300	A	ATXN2	22/23	23/23	normal
8	AAD-1302	A	ATXN2	21/22	22/22	normal
1	AAD-1303	A	ATXN2	21/22	22/22	normal
1	AAD-1304	A	ATXN2	22/22	22/22	normal
2	AAD-1304	A	ATXN2	22/22	22/22	normal
5	AAD-1306	A	ATXN2	22/22	22/22	normal
5	AAD-1309	A	ATXN2	22/22	22/22	normal
6	AAD-1310	A	ATXN2	19/22	19/22	normal
4	AAD-1316	A	ATXN2	21/22	22/22	normal

2	AAD-1320	A	ATXN2	22/23	22/23	normal
1	AAD-1323	A	ATXN2	22/22	22/22	normal
3	AAD-1324	A	ATXN2	22/22	22/22	normal
6	AAD-1325	A	ATXN2	21/22	22/22	normal
1	AAD-1326	A	ATXN2	22/22	22/22	normal
2	AAD-1326	A	ATXN2	22/22	22/22	normal
5	AAD-1328	A	ATXN2	22/22	22/22	normal
2	AAD-1329	A	ATXN2	22/22	22/22	normal
10	AAD-1330	A	ATXN2	21/22	22/22	normal
6	AAD-1332	A	ATXN2	22/22	22/22	normal
3	AAD-1333	A	ATXN2	21/22	22/22	normal
7	AAD-1335	A	ATXN2	22/22	22/22	normal
2	AAD-1336	A	ATXN2	21/22	22/22	normal
2	AAD-1340	A	ATXN2	22/23	22/23	normal
7	AAD-1341	A	ATXN2	22/23	22/23	normal
2	AAD-1342	A	ATXN2	22/23	22/23	normal
5	AAD-1347	A	ATXN2	22/29	22/29	normal
4	AAD-1349	A	ATXN2	22/22	22/22	normal
3	AAD-1350	A	ATXN2	22/22	22/22	normal
4	AAD-1351	A	ATXN2	23/23	23/23	normal
3	AAD-1352	A	ATXN2	22/23	22/23	normal
7	AAD-1352	A	ATXN2	22/29	22/29	normal
1	AAD-1353	A	ATXN2	21/22	22/22	normal
1	AAD-1354	A	ATXN2	22/23	22/23	normal
3	AAD-1355	A	ATXN2	21/22	22/22	normal
5	AAD-1356	A	ATXN2	22/22	22/22	normal
7	AAD-1358	A	ATXN2	22/22	22/22	normal
4	AAD-1359	A	ATXN2	22/23	22/23	normal
5	AAD-1360	A	ATXN2	22/22	22/22	normal
13	AAD-1362	A	ATXN2	22/22	22/22	normal
4	AAD-1363	A	ATXN2	21/22	22/22	normal
5	AAD-1364	A	ATXN2	22/23	22/23	normal
1	AAD-1367	A	ATXN2	22/22	22/22	normal
3	AAD-1371	A	ATXN2	21/22	22/22	normal
1	AAD-1378	A	ATXN2	21/22	22/22	normal
1	AAD-1379	A	ATXN2	21/22	22/22	normal
1	AAD-1380	A	ATXN2	22/22	22/22	normal
1	AAD-1383	A	ATXN2	22/22	22/22	normal
1	AAD-1385	A	ATXN2	22/22	22/22	normal
7	AAD-1386	A	ATXN2	22/22	22/22	normal
8	AAD-1387	A	ATXN2	22/23	22/23	normal
1	AAD-1398	A	ATXN2	21/22	22/22	normal
3	AAD-1398	A	ATXN2	22/22	22/22	normal
346	AAD-1398	A	ATXN2	22/22	22/22	normal
1	AAD-1407	A	ATXN2	22/22	22/22	normal

1	AAD-1410	A	ATXN2	22/22	22/22	normal
9	AAD-386	A	ATXN2	22/22	22/22	normal
7	AAD-481	A	ATXN2	21/22	22/22	normal
10	AAD-481	A	ATXN2	22/22	22/22	normal
3	AAD-723	A	ATXN2	22/22	22/22	normal
13	AAD-723	A	ATXN2	21/22	22/22	normal
7	AAD-726	A	ATXN2	22/22	22/22	normal
10	AAD-729	A	ATXN2	22/22	22/22	normal
5	AAD-736	A	ATXN2	22/22	22/22	normal
3	AAD-928	A	ATXN2	22/22	22/22	normal
20	AAD-928	A	ATXN2	22/23	22/23	normal
8	AAD-935	A	ATXN2	22/22	22/22	normal
1	AAD-952	A	ATXN2	22/22	22/22	normal
1	AAD-958	A	ATXN2	22/22	22/22	normal
7	AAD-960	A	ATXN2	22/22	22/22	normal
20	AAD-960	A	ATXN2	22/22	22/22	normal
1	AAD-961	A	ATXN2	21/22	22/22	normal
2	AAD-961	A	ATXN2	22/23	22/23	normal
1	AAD-963	A	ATXN2	22/23	22/23	normal
1	AAD-966	A	ATXN2	23/39	23/40	pathogenic
6	AAD-967	A	ATXN2	22/22	22/22	normal
8	AAD-967	A	ATXN2	22/23	22/23	normal
1	AAD-968	A	ATXN2	22/22	22/22	normal
1	AAD-972	A	ATXN2	22/22	22/22	normal
2	AAD-972	A	ATXN2	21/22	22/22	normal
4	AAD-973	A	ATXN2	21/22	22/22	normal
1	AAD-976	A	ATXN2	22/22	22/22	normal
2	AAD-976	A	ATXN2	21/22	22/22	normal
1	AAD-978	A	ATXN2	21/22	22/22	normal
6	AAD-979	A	ATXN2	21/22	22/22	normal
5	AAD-997	A	ATXN2	21/22	22/22	normal
6	AAD-997	A	ATXN2	21/22	22/22	normal
8	AAD-997	A	ATXN2	21/22	22/22	normal
1	AAD-999	A	ATXN2	22/22	22/22	normal
7	AAR-319	A	ATXN2	22/23	22/23	normal
1	AAR-549	A	ATXN2	22/22	22/22	normal
3	AAR-875	A	ATXN2	22/22	22/22	normal
3	AAR-880	A	ATXN2	22/22	22/22	normal
5	AAR-886	A	ATXN2	22/22	22/22	normal
3	AAR-887	A	ATXN2	22/22	22/22	normal
1	AAR-895	A	ATXN2	22/22	22/22	normal
24	FPD-1051	A	ATXN2	22/22	22/22	normal
1	FSP-1177	A	ATXN2	22/22	22/22	normal
5	FSP-1304	A	ATXN2	21/22	22/22	normal
1	FSP-1305	A	ATXN2	13/22	13/22	normal

2	FSP-1305	A	ATXN2	22/22	22/22	normal
1	FSP-1307	A	ATXN2	21/22	22/22	normal
7	FSP-1308	A	ATXN2	22/22	22/22	normal
11	FSP-1308	A	ATXN2	22/22	22/22	normal
3	FSP-403	A	ATXN2	22/22	22/22	normal
25	SAL-025	A	ATXN2	21/22	22/22	normal
1069	SAL-1069	A	ATXN2	22/22	22/22	normal
167	SAL-167	A	ATXN2	22/27	22/27	normal
4	SAL-307	A	ATXN2	22/22	22/22	normal
5	SAL-307	A	ATXN2	22/22	22/22	normal
7	SAL-307	A	ATXN2	22/23	22/23	normal
780	SAL-780	A	ATXN2	22/22	22/22	normal
904	SAL-904	A	ATXN2	22/22	22/22	normal
995	SAL-995	A	ATXN2	22/22	22/22	normal
13	AAD-1020	B	ATXN2	22/22		normal
1	AAD-1045	B	ATXN2	22/22		normal
1	AAD-1159	B	ATXN2	22/35	22/35	pathogenic
B0152	AAD-1213	B	ATXN2	22/22		normal
B0153	AAD-1213	B	ATXN2	22/27		normal
9	AAD-1249	B	ATXN2	22/22		normal
1	AAD-1250	B	ATXN2	22/22		normal
B0254	AAD-1261	B	ATXN2	21/22		normal
1	AAD-1274	B	ATXN2	22/39	22/39	pathogenic
1	AAD-1389	B	ATXN2	22/22		normal
10	AAD-139	B	ATXN2	22/23		normal
B0006	AAD-1397	B	ATXN2	18/22		normal
3	AAD-1399	B	ATXN2	22/22		normal
2	AAD-1421	B	ATXN2	22/22		normal
9	AAD-369	B	ATXN2	22/22		normal
3	AAD-377	B	ATXN2	21/22		normal
3	AAD-533	B	ATXN2	21/22		normal
6	AAD-566	B	ATXN2	21/22		normal
9	AAD-566	B	ATXN2	21/22		normal
10	AAD-566	B	ATXN2	22/22		normal
7	AAD-569	B	ATXN2	21/22		normal
5	AAD-635	B	ATXN2	22/22		normal
10	AAD-683	B	ATXN2	22/22		normal
12	AAD-683	B	ATXN2	22/22		normal
14	AAD-683	B	ATXN2	22/22		normal
15	AAD-683	B	ATXN2	21/22		normal
16	AAD-683	B	ATXN2	22/22		normal
5	AAD-743	B	ATXN2	21/22		normal
7	AAD-743	B	ATXN2	22/22		normal
B0080	AAD-743	B	ATXN2	22/27		normal
7	AAD-748	B	ATXN2	22/22		normal

1	AAD-834	B	ATXN2	21/22		normal
8	AAD-861	B	ATXN2	22/22		normal
4	AAD-891	B	ATXN2	21/22		normal
23	AAD-908	B	ATXN2	22/22		normal
B0079	AAD-908	B	ATXN2	22/22		normal
B0083	AAD-949	B	ATXN2	22/22		normal
8	AAD-971	B	ATXN2	22/23		normal
3	AAR-242	B	ATXN2	22/22		normal
5	AAR-500	B	ATXN2	22/22		normal
16	AAR-512	B	ATXN2	22/22		normal
1	AAR-676	B	ATXN2	22/23		normal
1	AAR-740	B	ATXN2	22/22		normal
B0149	AAR-860	B	ATXN2	22/29		normal
B0229	AAR-895	B	ATXN2	21/22		normal
10	AAR-912	B	ATXN2	22/23		normal
B0194	AGE-028	B	ATXN2	23/44	23/41	pathogenic
B0039	B0039	B	ATXN2	22/22		normal
B0040	B0040	B	ATXN2	22/22		normal
B0047	B0047	B	ATXN2	22/22		normal
B0071	B0071	B	ATXN2	22/22		normal
B0126	B0126	B	ATXN2	22/22		normal
B0146	B0146	B	ATXN2	22/22		normal
B0164	B0164	B	ATXN2	21/22		normal
B0168	B0168	B	ATXN2	22/27		normal
B0171	B0171	B	ATXN2	22/22		normal
B0198	B0198	B	ATXN2	22/22		normal
B0199	B0199	B	ATXN2	22/22		normal
B0215	B0215	B	ATXN2	22/23		normal
B0244	B0244	B	ATXN2	22/22		normal
B0247	B0247	B	ATXN2	22/22		normal
B0250	B0250	B	ATXN2	21/22		normal
B0253	B0253	B	ATXN2	21/22		normal
B0278	B0278	B	ATXN2	22/22		normal
1	CMT-234	B	ATXN2	22/22		normal
4	CMT-234	B	ATXN2	21/22		normal
16	CMT-234	B	ATXN2	22/23		normal
1	DFT-315	B	ATXN2	22/27		normal
9	DFT-326	B	ATXN2	22/27		normal
18	ENE-013	B	ATXN2	21/22		normal
9	FSP-006	B	ATXN2	22/24		normal
11	FSP-006	B	ATXN2	22/22		normal
13	FSP-006	B	ATXN2	19/22		normal
14	FSP-006	B	ATXN2	22/24		normal
20	FSP-056	B	ATXN2	22/22		normal
21	FSP-056	B	ATXN2	22/22		normal

1	FSP-078	B	ATXN2	21/22		normal
13	FSP-088	B	ATXN2	22/22		normal
1	FSP-1009	B	ATXN2	22/23		normal
4	FSP-1044	B	ATXN2	22/22		normal
1	FSP-1048	B	ATXN2	22/23		normal
5	FSP-1057	B	ATXN2	22/22		normal
7	FSP-1057	B	ATXN2	22/22		normal
8	FSP-1059	B	ATXN2	22/23		normal
1	FSP-1060	B	ATXN2	22/22		normal
4	FSP-1062	B	ATXN2	22/24		normal
1	FSP-1063	B	ATXN2	22/22		normal
5	FSP-1064	B	ATXN2	22/23		normal
6	FSP-1065	B	ATXN2	21/22		normal
6	FSP-1066	B	ATXN2	22/22		normal
3	FSP-1067	B	ATXN2	22/22		normal
12	FSP-1070	B	ATXN2	22/22		normal
3	FSP-1071	B	ATXN2	22/22		normal
11	FSP-1072	B	ATXN2	22/23		normal
1	FSP-1073	B	ATXN2	22/22		normal
10	FSP-1073	B	ATXN2	22/22		normal
1	FSP-1076	B	ATXN2	22/22		normal
9	FSP-1081	B	ATXN2	21/22		normal
3	FSP-1096	B	ATXN2	21/22		normal
5	FSP-1098	B	ATXN2	22/23		normal
4	FSP-1100	B	ATXN2	22/22		normal
4	FSP-1101	B	ATXN2	22/22		normal
1	FSP-1102	B	ATXN2	22/25		normal
3	FSP-1105	B	ATXN2	22/22		normal
3	FSP-1107	B	ATXN2	21/22		normal
4	FSP-1109	B	ATXN2	21/22		normal
7	FSP-1110	B	ATXN2	22/22		normal
7	FSP-1111	B	ATXN2	22/22		normal
3	FSP-1113	B	ATXN2	22/22		normal
1	FSP-1117	B	ATXN2	22/31		normal
4	FSP-1120	B	ATXN2	22/22		normal
1	FSP-1124	B	ATXN2	21/22		normal
2	FSP-1124	B	ATXN2	22/22		normal
22	FSP-1130	B	ATXN2	22/22		normal
15	FSP-1131	B	ATXN2	19/23		normal
3	FSP-1136	B	ATXN2	22/23		normal
1	FSP-1145	B	ATXN2	21/22		normal
4	FSP-1147	B	ATXN2	21/22		normal
3	FSP-1148	B	ATXN2	23/23		normal
1	FSP-1149	B	ATXN2	22/22		normal
1	FSP-1151	B	ATXN2	17/22		normal

4	FSP-1152	B	ATXN2	22/22		normal
5	FSP-1153	B	ATXN2	22/23		normal
1	FSP-1155	B	ATXN2	17/22		normal
1	FSP-1157	B	ATXN2	22/29		normal
1	FSP-1164	B	ATXN2	22/22		normal
1	FSP-1171	B	ATXN2	22/23		normal
3	FSP-1172	B	ATXN2	22/22		normal
3	FSP-1174	B	ATXN2	22/22		normal
1	FSP-1176	B	ATXN2	22/23		normal
3	FSP-1178	B	ATXN2	22/22		normal
1	FSP-1179	B	ATXN2	22/22		normal
7	FSP-1181	B	ATXN2	22/30		normal
1	FSP-1182	B	ATXN2	22/23		normal
1	FSP-1185	B	ATXN2	22/22		normal
1	FSP-1186	B	ATXN2	22/22		normal
1	FSP-1187	B	ATXN2	22/22		normal
1	FSP-1188	B	ATXN2	22/22		normal
1	FSP-1189	B	ATXN2	22/23		normal
1	FSP-1191	B	ATXN2	22/22		normal
1	FSP-1193	B	ATXN2	22/23		normal
1	FSP-1194	B	ATXN2	22/22		normal
1	FSP-1288	B	ATXN2	21/22		normal
2	FSP-1308	B	ATXN2	22/22		normal
3	FSP-1308	B	ATXN2	22/22		normal
1	FSP-1359	B	ATXN2	22/23		normal
1	FSP-1426	B	ATXN2	21/22		normal
1	FSP-1433	B	ATXN2	22/22		normal
2	FSP-1452	B	ATXN2	21/22		normal
1	FSP-1455	B	ATXN2	22/22		normal
1	FSP-1458	B	ATXN2	22/27		normal
1	FSP-1459	B	ATXN2	22/22		normal
1	FSP-1467	B	ATXN2	22/27		normal
1	FSP-1470	B	ATXN2	21/22		normal
1	FSP-1480	B	ATXN2	22/22		normal
1	FSP-1482	B	ATXN2	22/23		normal
1	FSP-1499	B	ATXN2	17/22		normal
1	FSP-1500	B	ATXN2	22/22		normal
1	FSP-1506	B	ATXN2	21/22		normal
1	FSP-1507	B	ATXN2	22/23		normal
2	FSP-1507	B	ATXN2	22/23		normal
1	FSP-1509	B	ATXN2	22/22		normal
1	FSP-1510	B	ATXN2	22/22		normal
1	FSP-1515	B	ATXN2	22/23		normal
1	FSP-1529	B	ATXN2	21/22		normal
1	FSP-1531	B	ATXN2	21/22		normal

1	FSP-1537	B	ATXN2	22/22		normal
1	FSP-1540	B	ATXN2	22/22		normal
1	FSP-1544	B	ATXN2	22/22		normal
1	FSP-1546	B	ATXN2	22/22		normal
B0110	FSP-1547	B	ATXN2	22/23		normal
1	FSP-1548	B	ATXN2	22/24		normal
1	FSP-1558	B	ATXN2	22/27		normal
1	FSP-1560	B	ATXN2	22/22		normal
4	FSP-1568	B	ATXN2	22/22		normal
5	FSP-1568	B	ATXN2	22/22		normal
2	FSP-1569	B	ATXN2	22/22		normal
B0022	FSP-1570	B	ATXN2	22/22		normal
3	FSP-1573	B	ATXN2	21/22		normal
5	FSP-1576	B	ATXN2	21/22		normal
1	FSP-1579	B	ATXN2	22/23		normal
6	FSP-1582	B	ATXN2	21/22		normal
8	FSP-1582	B	ATXN2	21/22		normal
3	FSP-1584	B	ATXN2	21/22		normal
10	FSP-1585	B	ATXN2	22/22		normal
1	FSP-1586	B	ATXN2	17/22		normal
2	FSP-1588	B	ATXN2	22/22		normal
4	FSP-1592	B	ATXN2	21/22		normal
1	FSP-1593	B	ATXN2	22/22		normal
3	FSP-1593	B	ATXN2	22/22		normal
13	FSP-1594	B	ATXN2	19/22		normal
6	FSP-1595	B	ATXN2	22/22		normal
7	FSP-1600	B	ATXN2	22/23		normal
6	FSP-1634	B	ATXN2	22/22		normal
2	FSP-1636	B	ATXN2	22/22		normal
3	FSP-1638	B	ATXN2	22/22		normal
B0037	FSP-258	B	ATXN2	22/22		normal
10	FSP-405	B	ATXN2	22/23		normal
11	FSP-455	B	ATXN2	22/22		normal
B0241	FSP-491	B	ATXN2	22/22		normal
B0182	FSP-820	B	ATXN2	22/22		normal
18	FSP-929	B	ATXN2	22/22		normal
6	FSP-985	B	ATXN2	22/22		normal
4	ITD-539	B	ATXN2	22/22		normal
10	ITD-868	B	ATXN2	22/22		normal
B0068	ITD-868	B	ATXN2	21/22		normal
B0109	PED-1526	B	ATXN2	22/23		normal
1057	SAL-105	B	ATXN2	22/23		normal
1053	SAL-1053	B	ATXN2	22/22		normal
1070	SAL-107	B	ATXN2	18/22		normal
1082	SAL-108	B	ATXN2	22/22		normal

1083	SAL-1083	B	ATXN2	22/23		normal
1085	SAL-1085	B	ATXN2	22/22		normal
1086	SAL-1086	B	ATXN2	22/22		normal
1088	SAL-1088	B	ATXN2	21/22		normal
1089	SAL-1089	B	ATXN2	22/22		normal
1098	SAL-109	B	ATXN2	22/23		normal
1090	SAL-1090	B	ATXN2	22/24		normal
1	SAL-1100	B	ATXN2	22/22		normal
3	SAL-1100	B	ATXN2	22/22		normal
1101	SAL-1101	B	ATXN2	22/22		normal
113	SAL-113	B	ATXN2	22/22		normal
B0233	SAL-113	B	ATXN2	22/22		normal
4	SAL-1603	B	ATXN2	22/22		normal
B0117	SAL-1606	B	ATXN2	17/22		normal
2	SAL-2806	B	ATXN2	22/23		normal
18	SAL-315	B	ATXN2	22/39	22/39	pathogenic
22	SAL-315	B	ATXN2	22/41	22/40	pathogenic
24	SAL-315	B	ATXN2	22/44	22/39	pathogenic
26	SAL-315	B	ATXN2	22/40	22/40	pathogenic
32	SAL-315	B	ATXN2	22/42	22/41	pathogenic
38	SAL-315	B	ATXN2	22/22		normal
40	SAL-315	B	ATXN2	22/50	22/50	pathogenic
B0169	SAL-315	B	ATXN2	22/41	22/40	pathogenic
646	SAL-646	B	ATXN2	22/22		normal
650	SAL-650	B	ATXN2	22/22		normal
654	SAL-654	B	ATXN2	21/22		normal
713	SAL-713	B	ATXN2	22/22		normal
789	SAL-789	B	ATXN2	22/22		normal
4	SAL-866	B	ATXN2	21/22		normal
7	SAL-866	B	ATXN2	22/22		normal
872	SAL-872	B	ATXN2	22/22		normal
874	SAL-874	B	ATXN2	22/23		normal
878	SAL-878	B	ATXN2	22/22		normal
881	SAL-881	B	ATXN2	22/22		normal
883	SAL-883	B	ATXN2	22/22		normal
887	SAL-887	B	ATXN2	22/22		normal
891	SAL-891	B	ATXN2	22/22		normal
892	SAL-892	B	ATXN2	22/22		normal
893	SAL-893	B	ATXN2	22/23		normal
900	SAL-900	B	ATXN2	22/22		normal
901	SAL-901	B	ATXN2	21/22		normal
902	SAL-902	B	ATXN2	21/22		normal
905	SAL-905	B	ATXN2	22/22		normal
906	SAL-906	B	ATXN2	22/22		normal
1	SAL-919	B	ATXN2	22/22		normal

2	SAL-919	B	ATXN2	21/22		normal
919	SAL-919	B	ATXN2	21/22		normal
1	AAD-1004	A	ATXN3	11/20	14/23	normal
9	AAD-1007	A	ATXN3	20/21	23/24	normal
1	AAD-1008	A	ATXN3	20/23	23/26	normal
1	AAD-1011	A	ATXN3	11/20	14/23	normal
2	AAD-1011	A	ATXN3	11/20	14/23	normal
1	AAD-1012	A	ATXN3	18/18	21/21	normal
1	AAD-1014	A	ATXN3	11/20	14/23	normal
2	AAD-1014	A	ATXN3	18/20	21/23	normal
1	AAD-1015	A	ATXN3	11/19	14/22	normal
1	AAD-1017	A	ATXN3	17/20	20/23	normal
2	AAD-1017	A	ATXN3	19/20	23/23	normal
3	AAD-1017	A	ATXN3	17/20	20/23	normal
4	AAD-1017	A	ATXN3	17/20	20/23	normal
1	AAD-1019	A	ATXN3	19/24	22/27	normal
11	AAD-1020	A	ATXN3	18/24	21/27	normal
1	AAD-1021	A	ATXN3	18/20	21/23	normal
2	AAD-1021	A	ATXN3	20/21	23/24	normal
1	AAD-1023	A	ATXN3	17/18	20/21	normal
1	AAD-1024	A	ATXN3	11/18	14/21	normal
1	AAD-1031	A	ATXN3	20/24	23/27	normal
1	AAD-1032	A	ATXN3	11/23	14/26	normal
1	AAD-1035	A	ATXN3	19/20	23/23	normal
1	AAD-1036	A	ATXN3	11/18	14/21	normal
2	AAD-1036	A	ATXN3	18/20	21/23	normal
3	AAD-1036	A	ATXN3	18/20	21/23	normal
4	AAD-1036	A	ATXN3	11/20	14/23	normal
1	AAD-1038	A	ATXN3	20/24	23/27	normal
1	AAD-1040	A	ATXN3	11/17	14/20	normal
1	AAD-1043	A	ATXN3	20/24	23/27	normal
1	AAD-1044	A	ATXN3	11/11	14/14	normal
1	AAD-1046	A	ATXN3	20/24	23/27	normal
1	AAD-1048	A	ATXN3	11/20	14/23	normal
1	AAD-1050	A	ATXN3	17/21	20/24	normal
3	AAD-1050	A	ATXN3	17/17	20/20	normal
4	AAD-1050	A	ATXN3	16/17	20/20	normal
1	AAD-1051	A	ATXN3	20/24	23/27	normal
2	AAD-1051	A	ATXN3	17/20	20/23	normal
1	AAD-1052	A	ATXN3	21/24	24/27	normal
1	AAD-1058	A	ATXN3	11/24	14/27	normal
1	AAD-1059	A	ATXN3	17/21	20/24	normal
1	AAD-1061	A	ATXN3	11/11	14/14	normal
1	AAD-1063	A	ATXN3	17/24	20/27	normal
2	AAD-1063	A	ATXN3	23/24	27/27	normal

1	AAD-1064	A	ATXN3	18/25	21/28	normal
2	AAD-1064	A	ATXN3	20/25	23/28	normal
1	AAD-1065	A	ATXN3	20/25	23/28	normal
2	AAD-1065	A	ATXN3	23/25	26/28	normal
3	AAD-1065	A	ATXN3	24/25	27/28	normal
1	AAD-1067	A	ATXN3	11/20	14/23	normal
1	AAD-1068	A	ATXN3	18/24	21/27	normal
1	AAD-1072	A	ATXN3	17/20	20/23	normal
1	AAD-1074	A	ATXN3	19/20	22/23	normal
1	AAD-1079	A	ATXN3	20/21	23/24	normal
1	AAD-1082	A	ATXN3	11/11	14/14	normal
1	AAD-1085	A	ATXN3	20/21	23/24	normal
1	AAD-1087	A	ATXN3	11/24	14/27	normal
1	AAD-1088	A	ATXN3	11/21	14/24	normal
1	AAD-1089	A	ATXN3	11/12	14/15	normal
1	AAD-1090	A	ATXN3	18/24	21/27	normal
1	AAD-1091	A	ATXN3	11/20	14/23	normal
1	AAD-1093	A	ATXN3	20/23	23/26	normal
1	AAD-1096	A	ATXN3	11/18	14/21	normal
1	AAD-1097	A	ATXN3	11/11	14/14	normal
1	AAD-1101	A	ATXN3	11/20	14/23	normal
1	AAD-1102	A	ATXN3	20/50	23/67	pathogenic
1	AAD-1103	A	ATXN3	11/21	14/24	normal
1	AAD-1104	A	ATXN3	20/24	23/27	normal
1	AAD-1105	A	ATXN3	11/24	14/27	normal
1	AAD-1107	A	ATXN3	20/24	23/27	normal
1	AAD-1108	A	ATXN3	17/21	20/24	normal
1	AAD-1110	A	ATXN3	18/20	21/23	normal
1	AAD-1111	A	ATXN3	11/18	14/21	normal
1	AAD-1112	A	ATXN3	11/11	14/14	normal
2	AAD-1112	A	ATXN3	11/25	14/28	normal
1	AAD-1114	A	ATXN3	20/26	23/29	normal
1	AAD-1115	A	ATXN3	11/20	14/23	normal
1	AAD-1119	A	ATXN3	11/29	14/32	normal
1	AAD-1121	A	ATXN3	18/24	21/27	normal
2	AAD-1121	A	ATXN3	20/24	23/27	normal
1	AAD-1123	A	ATXN3	11/18	14/21	normal
1	AAD-1124	A	ATXN3	18/24	21/27	normal
1	AAD-1125	A	ATXN3	19/20	23/23	normal
1	AAD-1127	A	ATXN3	11/21	14/24	normal
1	AAD-1130	A	ATXN3	11/18	14/21	normal
1	AAD-1131	A	ATXN3	11/17	14/20	normal
1	AAD-1133	A	ATXN3	20/21	23/24	normal
1	AAD-1148	A	ATXN3	11/21	14/24	normal
2	AAD-1148	A	ATXN3	11/19	14/22	normal

4	AAD-1148	A	ATXN3	11/20	14/23	normal
1	AAD-1150	A	ATXN3	11/18	14/21	normal
1	AAD-1154	A	ATXN3	19/20	23/23	normal
1	AAD-1155	A	ATXN3	11/24	14/27	normal
1	AAD-1156	A	ATXN3	20/20	23/23	normal
1	AAD-1158	A	ATXN3	20/24	23/27	normal
1	AAD-1160	A	ATXN3	11/24	14/27	normal
1	AAD-1161	A	ATXN3	20/25	23/28	normal
1	AAD-1163	A	ATXN3	19/20	23/23	normal
1	AAD-1164	A	ATXN3	19/20	23/23	normal
1	AAD-1165	A	ATXN3	19/20	23/23	normal
1	AAD-1171	A	ATXN3	11/11	14/14	normal
1	AAD-1172	A	ATXN3	20/25	23/28	normal
1	AAD-1173	A	ATXN3	20/24	23/27	normal
1	AAD-1175	A	ATXN3	11/18	14/21	normal
1	AAD-1176	A	ATXN3	11/19	14/22	normal
1	AAD-1178	A	ATXN3	11/23	14/26	normal
1	AAD-1179	A	ATXN3	11/24	14/27	normal
2	AAD-1179	A	ATXN3	11/24	14/27	normal
1	AAD-1181	A	ATXN3	19/20	23/23	normal
1	AAD-1184	A	ATXN3	20/25	23/28	normal
1	AAD-1185	A	ATXN3	16/24	19/27	normal
1	AAD-1190	A	ATXN3	20/21	23/24	normal
1	AAD-1191	A	ATXN3	11/24	14/27	normal
1	AAD-1192	A	ATXN3	20/21	23/24	normal
1	AAD-1194	A	ATXN3	11/20	14/23	normal
1	AAD-1195	A	ATXN3	17/25	20/28	normal
1	AAD-1198	A	ATXN3	11/18	14/21	normal
1	AAD-1201	A	ATXN3	19/20	22/23	normal
1	AAD-1205	A	ATXN3	11/20	14/23	normal
1	AAD-1206	A	ATXN3	24/50	27/65	pathogenic
1	AAD-1220	A	ATXN3	11/20	14/23	normal
1	AAD-1221	A	ATXN3	11/11	14/14	normal
3	AAD-1247	A	ATXN3	11/24	14/27	normal
10	AAD-1251	A	ATXN3	11/23	14/26	normal
3	AAD-1267	A	ATXN3	19/30	22/33	normal
2	AAD-1269	A	ATXN3	23/24	27/27	normal
4	AAD-1269	A	ATXN3	11/18	14/21	normal
5	AAD-1271	A	ATXN3	20/21	23/24	normal
13	AAD-1280	A	ATXN3	11/18	14/21	normal
4	AAD-1285	A	ATXN3	12/27	15/30	normal
3	AAD-1288	A	ATXN3	17/19	20/22	normal
2	AAD-1291	A	ATXN3	17/21	20/24	normal
3	AAD-1294	A	ATXN3	18/20	21/23	normal
3	AAD-1296	A	ATXN3	11/20	14/23	normal

3	AAD-1299	A	ATXN3	11/20	14/23	normal
2	AAD-1300	A	ATXN3	21/24	24/27	normal
8	AAD-1302	A	ATXN3	20/27	23/30	normal
1	AAD-1303	A	ATXN3	19/20	23/23	normal
1	AAD-1304	A	ATXN3	24/33	27/36	normal
2	AAD-1304	A	ATXN3	24/32	27/35	normal
5	AAD-1306	A	ATXN3	19/20	23/23	normal
5	AAD-1309	A	ATXN3	20/24	23/27	normal
6	AAD-1310	A	ATXN3	18/20	21/23	normal
4	AAD-1316	A	ATXN3	20/24	23/27	normal
2	AAD-1320	A	ATXN3	11/18	14/21	normal
1	AAD-1323	A	ATXN3	11/11	14/14	normal
3	AAD-1324	A	ATXN3	11/20	14/23	normal
6	AAD-1325	A	ATXN3	11/25	14/28	normal
1	AAD-1326	A	ATXN3	11/11	14/14	normal
2	AAD-1326	A	ATXN3	11/20	14/23	normal
5	AAD-1328	A	ATXN3	11/20	14/23	normal
2	AAD-1329	A	ATXN3	17/20	20/23	normal
10	AAD-1330	A	ATXN3	11/22	14/25	normal
6	AAD-1332	A	ATXN3	11/30	14/33	normal
3	AAD-1333	A	ATXN3	11/28	14/31	normal
7	AAD-1335	A	ATXN3	11/11	14/14	normal
2	AAD-1336	A	ATXN3	19/20	23/23	normal
2	AAD-1340	A	ATXN3	17/20	20/23	normal
7	AAD-1341	A	ATXN3	21/24	24/27	normal
2	AAD-1342	A	ATXN3	11/26	14/29	normal
5	AAD-1347	A	ATXN3	17/27	20/30	normal
4	AAD-1349	A	ATXN3	11/21	14/24	normal
3	AAD-1350	A	ATXN3	11/21	14/24	normal
4	AAD-1351	A	ATXN3	20/26	23/29	normal
3	AAD-1352	A	ATXN3	19/20	23/23	normal
7	AAD-1352	A	ATXN3	20/21	23/24	normal
1	AAD-1353	A	ATXN3	11/24	14/27	normal
1	AAD-1354	A	ATXN3	17/18	21/21	normal
3	AAD-1355	A	ATXN3	24/25	27/28	normal
5	AAD-1356	A	ATXN3	18/20	21/23	normal
7	AAD-1358	A	ATXN3	20/20	23/23	normal
4	AAD-1359	A	ATXN3	20/24	23/27	normal
5	AAD-1360	A	ATXN3	11/11	14/14	normal
13	AAD-1362	A	ATXN3	19/20	23/23	normal
4	AAD-1363	A	ATXN3	11/28	14/31	normal
5	AAD-1364	A	ATXN3	20/21	23/24	normal
1	AAD-1367	A	ATXN3	11/12	14/15	normal
3	AAD-1371	A	ATXN3	20/24	23/27	normal
1	AAD-1378	A	ATXN3	19/20	23/23	normal

1	AAD-1379	A	ATXN3	11/24	14/27	normal
1	AAD-1380	A	ATXN3	23/24	27/27	normal
1	AAD-1383	A	ATXN3	30/52	33/63	pathogenic
1	AAD-1385	A	ATXN3	18/19	21/22	normal
7	AAD-1386	A	ATXN3	17/18	20/21	normal
8	AAD-1387	A	ATXN3	11/24	14/27	normal
1	AAD-1398	A	ATXN3	19/20	23/23	normal
3	AAD-1398	A	ATXN3	19/20	23/23	normal
346	AAD-1398	A	ATXN3	20/24	23/27	normal
1	AAD-1407	A	ATXN3	11/26	14/29	normal
1	AAD-1410	A	ATXN3	11/20	14/23	normal
9	AAD-386	A	ATXN3	18/20	21/23	normal
7	AAD-481	A	ATXN3	17/20	20/23	normal
10	AAD-481	A	ATXN3	11/20	14/23	normal
3	AAD-723	A	ATXN3	19/20	23/23	normal
13	AAD-723	A	ATXN3	11/20	14/23	normal
7	AAD-726	A	ATXN3	23/24	27/27	normal
10	AAD-729	A	ATXN3	11/20	14/23	normal
5	AAD-736	A	ATXN3	20/25	23/28	normal
3	AAD-928	A	ATXN3	18/20	21/23	normal
20	AAD-928	A	ATXN3	18/20	21/23	normal
8	AAD-935	A	ATXN3	11/24	14/27	normal
1	AAD-952	A	ATXN3	17/20	20/23	normal
1	AAD-958	A	ATXN3	19/24	22/27	normal
7	AAD-960	A	ATXN3	11/24	14/27	normal
20	AAD-960	A	ATXN3	11/11	14/14	normal
1	AAD-961	A	ATXN3	11/11	14/14	normal
2	AAD-961	A	ATXN3	11/11	14/14	normal
1	AAD-963	A	ATXN3	18/20	21/23	normal
1	AAD-966	A	ATXN3	17/26	20/29	normal
6	AAD-967	A	ATXN3	23/24	27/27	normal
8	AAD-967	A	ATXN3	23/24	27/27	normal
1	AAD-968	A	ATXN3	11/20	14/23	normal
1	AAD-972	A	ATXN3	20/24	23/27	normal
2	AAD-972	A	ATXN3	11/24	14/27	normal
4	AAD-973	A	ATXN3	17/20	20/23	normal
1	AAD-976	A	ATXN3	11/18	14/21	normal
2	AAD-976	A	ATXN3	18/27	21/30	normal
1	AAD-978	A	ATXN3	16/20	19/23	normal
6	AAD-979	A	ATXN3	11/18	14/21	normal
5	AAD-997	A	ATXN3	11/19	14/22	normal
6	AAD-997	A	ATXN3	19/20	23/23	normal
8	AAD-997	A	ATXN3	19/20	23/23	normal
1	AAD-999	A	ATXN3	20/24	23/27	normal
7	AAR-319	A	ATXN3	11/20	14/23	normal

1	AAR-549	A	ATXN3	20/21	23/24	normal
3	AAR-875	A	ATXN3	20/24	23/27	normal
3	AAR-880	A	ATXN3	19/20	23/23	normal
5	AAR-886	A	ATXN3	11/20	14/23	normal
3	AAR-887	A	ATXN3	18/20	21/23	normal
1	AAR-895	A	ATXN3	11/20	14/23	normal
24	FPD-1051	A	ATXN3	20/20	23/23	normal
1	FSP-1177	A	ATXN3	11/21	14/24	normal
5	FSP-1304	A	ATXN3	20/20	23/23	normal
1	FSP-1305	A	ATXN3	21/24	24/27	normal
2	FSP-1305	A	ATXN3	19/20	23/23	normal
1	FSP-1307	A	ATXN3	20/20	23/23	normal
7	FSP-1308	A	ATXN3	20/24	23/27	normal
11	FSP-1308	A	ATXN3	19/20	23/23	normal
3	FSP-403	A	ATXN3	11/20	14/23	normal
25	SAL-025	A	ATXN3	11/11	14/14	normal
1069	SAL-1069	A	ATXN3	11/24	14/27	normal
167	SAL-167	A	ATXN3	20/25	23/28	normal
4	SAL-307	A	ATXN3	11/21	14/24	normal
5	SAL-307	A	ATXN3	11/11	14/14	normal
7	SAL-307	A	ATXN3	21/24	24/27	normal
780	SAL-780	A	ATXN3	20/24	23/27	normal
904	SAL-904	A	ATXN3	20/24	23/27	normal
995	SAL-995	A	ATXN3	11/20	14/23	normal
13	AAD-1020	B	ATXN3	17/24		normal
1	AAD-1045	B	ATXN3	11/20		normal
1	AAD-1159	B	ATXN3	20/20		normal
B0152	AAD-1213	B	ATXN3	18/31		normal
B0153	AAD-1213	B	ATXN3	18/20		normal
9	AAD-1249	B	ATXN3	20/20		normal
1	AAD-1250	B	ATXN3	17/20		normal
B0254	AAD-1261	B	ATXN3	11/20		normal
1	AAD-1274	B	ATXN3	25/30		normal
1	AAD-1389	B	ATXN3	19/20		normal
10	AAD-139	B	ATXN3	11/15		normal
B0006	AAD-1397	B	ATXN3	11/20		normal
3	AAD-1399	B	ATXN3	11/20		normal
2	AAD-1421	B	ATXN3	11/24		normal
9	AAD-369	B	ATXN3	19/20		normal
3	AAD-377	B	ATXN3	23/24		normal
3	AAD-533	B	ATXN3	11/23		normal
6	AAD-566	B	ATXN3	19/20		normal
9	AAD-566	B	ATXN3	19/20		normal
10	AAD-566	B	ATXN3	11/24		normal
7	AAD-569	B	ATXN3	20/26		normal

5	AAD-635	B	ATXN3	11/18		normal
10	AAD-683	B	ATXN3	23/24		normal
12	AAD-683	B	ATXN3	23/24		normal
14	AAD-683	B	ATXN3	20/24		normal
15	AAD-683	B	ATXN3	20/24		normal
16	AAD-683	B	ATXN3	17/24		normal
5	AAD-743	B	ATXN3	20/21		normal
7	AAD-743	B	ATXN3	17/20		normal
B0080	AAD-743	B	ATXN3	20/24		normal
7	AAD-748	B	ATXN3	20/49	24/50	pathogenic
1	AAD-834	B	ATXN3	20/23		normal
8	AAD-861	B	ATXN3	15/18		normal
4	AAD-891	B	ATXN3	20/20		normal
23	AAD-908	B	ATXN3	17/18		normal
B0079	AAD-908	B	ATXN3	17/18		normal
B0083	AAD-949	B	ATXN3	11/20		normal
8	AAD-971	B	ATXN3	20/31		normal
3	AAR-242	B	ATXN3	26/28		normal
5	AAR-500	B	ATXN3	11/11		normal
16	AAR-512	B	ATXN3	18/20		normal
1	AAR-676	B	ATXN3	11/20		normal
1	AAR-740	B	ATXN3	17/17		normal
B0149	AAR-860	B	ATXN3	19/24		normal
B0229	AAR-895	B	ATXN3	11/20		normal
10	AAR-912	B	ATXN3	11/20		normal
B0194	AGE-028	B	ATXN3	11/20		normal
B0039	B0039	B	ATXN3	11/20		normal
B0040	B0040	B	ATXN3	18/25		normal
B0047	B0047	B	ATXN3	11/24		normal
B0071	B0071	B	ATXN3	11/60	14/81	pathogenic
B0126	B0126	B	ATXN3	11/17		normal
B0146	B0146	B	ATXN3	11/20		normal
B0164	B0164	B	ATXN3	18/20		normal
B0168	B0168	B	ATXN3	11/25		normal
B0171	B0171	B	ATXN3	21/27		normal
B0198	B0198	B	ATXN3	18/23		normal
B0199	B0199	B	ATXN3	20/24		normal
B0215	B0215	B	ATXN3	11/24		normal
B0244	B0244	B	ATXN3	20/33		normal
B0247	B0247	B	ATXN3	17/17		normal
B0250	B0250	B	ATXN3	17/24		normal
B0253	B0253	B	ATXN3	20/25		normal
B0278	B0278	B	ATXN3	11/20		normal
1	CMT-234	B	ATXN3	20/28		normal
4	CMT-234	B	ATXN3	11/28		normal

16	CMT-234	B	ATXN3	20/30		normal
1	DFT-315	B	ATXN3	20/21		normal
9	DFT-326	B	ATXN3	19/20		normal
18	ENE-013	B	ATXN3	11/23		normal
9	FSP-006	B	ATXN3	20/26		normal
11	FSP-006	B	ATXN3	11/26		normal
13	FSP-006	B	ATXN3	20/21		normal
14	FSP-006	B	ATXN3	20/27		normal
20	FSP-056	B	ATXN3	20/21		normal
21	FSP-056	B	ATXN3	18/21		normal
1	FSP-078	B	ATXN3	23/24		normal
13	FSP-088	B	ATXN3	11/20		normal
1	FSP-1009	B	ATXN3	17/24		normal
4	FSP-1044	B	ATXN3	11/24		normal
1	FSP-1048	B	ATXN3	20/38		normal
5	FSP-1057	B	ATXN3	11/18		normal
7	FSP-1057	B	ATXN3	11/20		normal
8	FSP-1059	B	ATXN3	11/26		normal
1	FSP-1060	B	ATXN3	11/11		normal
4	FSP-1062	B	ATXN3	18/20		normal
1	FSP-1063	B	ATXN3	20/20		normal
5	FSP-1064	B	ATXN3	11/11		normal
6	FSP-1065	B	ATXN3	11/24		normal
6	FSP-1066	B	ATXN3	20/24		normal
3	FSP-1067	B	ATXN3	18/20		normal
12	FSP-1070	B	ATXN3	11/29		normal
3	FSP-1071	B	ATXN3	20/27		normal
11	FSP-1072	B	ATXN3	11/21		normal
1	FSP-1073	B	ATXN3	18/18		normal
10	FSP-1073	B	ATXN3	18/20		normal
1	FSP-1076	B	ATXN3	11/20		normal
9	FSP-1081	B	ATXN3	18/20		normal
3	FSP-1096	B	ATXN3	20/24		normal
5	FSP-1098	B	ATXN3	20/26		normal
4	FSP-1100	B	ATXN3	11/11		normal
4	FSP-1101	B	ATXN3	23/24		normal
1	FSP-1102	B	ATXN3	11/24		normal
3	FSP-1105	B	ATXN3	18/18		normal
3	FSP-1107	B	ATXN3	11/20		normal
4	FSP-1109	B	ATXN3	22/24		normal
7	FSP-1110	B	ATXN3	25/26		normal
7	FSP-1111	B	ATXN3	17/24		normal
3	FSP-1113	B	ATXN3	17/17		normal
1	FSP-1117	B	ATXN3	19/20		normal
4	FSP-1120	B	ATXN3	19/20		normal

1	FSP-1124	B	ATXN3	20/20		normal
2	FSP-1124	B	ATXN3	19/20		normal
22	FSP-1130	B	ATXN3	11/25		normal
15	FSP-1131	B	ATXN3	11/30		normal
3	FSP-1136	B	ATXN3	18/20		normal
1	FSP-1145	B	ATXN3	19/24		normal
4	FSP-1147	B	ATXN3	18/25		normal
3	FSP-1148	B	ATXN3	17/19		normal
1	FSP-1149	B	ATXN3	11/18		normal
1	FSP-1151	B	ATXN3	11/19		normal
4	FSP-1152	B	ATXN3	20/24		normal
5	FSP-1153	B	ATXN3	11/21		normal
1	FSP-1155	B	ATXN3	19/20		normal
1	FSP-1157	B	ATXN3	17/20		normal
1	FSP-1164	B	ATXN3	19/20		normal
1	FSP-1171	B	ATXN3	11/24		normal
3	FSP-1172	B	ATXN3	20/20		normal
3	FSP-1174	B	ATXN3	11/23		normal
1	FSP-1176	B	ATXN3	23/24		normal
3	FSP-1178	B	ATXN3	11/21		normal
1	FSP-1179	B	ATXN3	11/17		normal
7	FSP-1181	B	ATXN3	20/20		normal
1	FSP-1182	B	ATXN3	11/20		normal
1	FSP-1185	B	ATXN3	11/21		normal
1	FSP-1186	B	ATXN3	20/31		normal
1	FSP-1187	B	ATXN3	21/27		normal
1	FSP-1188	B	ATXN3	19/20		normal
1	FSP-1189	B	ATXN3	20/24		normal
1	FSP-1191	B	ATXN3	11/11		normal
1	FSP-1193	B	ATXN3	20/27		normal
1	FSP-1194	B	ATXN3	11/20		normal
1	FSP-1288	B	ATXN3	24/28		normal
2	FSP-1308	B	ATXN3	20/24		normal
3	FSP-1308	B	ATXN3	24/25		normal
1	FSP-1359	B	ATXN3	18/23		normal
1	FSP-1426	B	ATXN3	11/20		normal
1	FSP-1433	B	ATXN3	20/25		normal
2	FSP-1452	B	ATXN3	20/30		normal
1	FSP-1455	B	ATXN3	11/20		normal
1	FSP-1458	B	ATXN3	11/18		normal
1	FSP-1459	B	ATXN3	17/24		normal
1	FSP-1467	B	ATXN3	20/31		normal
1	FSP-1470	B	ATXN3	11/11		normal
1	FSP-1480	B	ATXN3	17/19		normal
1	FSP-1482	B	ATXN3	19/20		normal

1	FSP-1499	B	ATXN3	11/20		normal
1	FSP-1500	B	ATXN3	20/24		normal
1	FSP-1506	B	ATXN3	17/20		normal
1	FSP-1507	B	ATXN3	20/25		normal
2	FSP-1507	B	ATXN3	20/24		normal
1	FSP-1509	B	ATXN3	20/21		normal
1	FSP-1510	B	ATXN3	20/24		normal
1	FSP-1515	B	ATXN3	20/20		normal
1	FSP-1529	B	ATXN3	11/17		normal
1	FSP-1531	B	ATXN3	13/18		normal
1	FSP-1537	B	ATXN3	17/20		normal
1	FSP-1540	B	ATXN3	21/21		normal
1	FSP-1544	B	ATXN3	11/17		normal
1	FSP-1546	B	ATXN3	11/11		normal
B0110	FSP-1547	B	ATXN3	11/19		normal
1	FSP-1548	B	ATXN3	17/24		normal
1	FSP-1558	B	ATXN3	20/24		normal
1	FSP-1560	B	ATXN3	11/20		normal
4	FSP-1568	B	ATXN3	11/24		normal
5	FSP-1568	B	ATXN3	17/24		normal
2	FSP-1569	B	ATXN3	20/24		normal
B0022	FSP-1570	B	ATXN3	20/24		normal
3	FSP-1573	B	ATXN3	18/24		normal
5	FSP-1576	B	ATXN3	11/20		normal
1	FSP-1579	B	ATXN3	23/24		normal
6	FSP-1582	B	ATXN3	11/11		normal
8	FSP-1582	B	ATXN3	11/11		normal
3	FSP-1584	B	ATXN3	11/20		normal
10	FSP-1585	B	ATXN3	20/25		normal
1	FSP-1586	B	ATXN3	20/20		normal
2	FSP-1588	B	ATXN3	11/19		normal
4	FSP-1592	B	ATXN3	20/20		normal
1	FSP-1593	B	ATXN3	11/20		normal
3	FSP-1593	B	ATXN3	19/20		normal
13	FSP-1594	B	ATXN3	17/20		normal
6	FSP-1595	B	ATXN3	17/20		normal
7	FSP-1600	B	ATXN3	11/23		normal
6	FSP-1634	B	ATXN3	11/20		normal
2	FSP-1636	B	ATXN3	20/20		normal
3	FSP-1638	B	ATXN3	11/21		normal
B0037	FSP-258	B	ATXN3	20/20		normal
10	FSP-405	B	ATXN3	11/11		normal
11	FSP-455	B	ATXN3	20/20		normal
B0241	FSP-491	B	ATXN3	20/24		normal
B0182	FSP-820	B	ATXN3	11/20		normal

18	FSP-929	B	ATXN3	19/20		normal
6	FSP-985	B	ATXN3	11/23		normal
4	ITD-539	B	ATXN3	18/20		normal
10	ITD-868	B	ATXN3	11/24		normal
B0068	ITD-868	B	ATXN3	11/24		normal
B0109	PED-1526	B	ATXN3	11/24		normal
1057	SAL-105	B	ATXN3	20/24		normal
1053	SAL-1053	B	ATXN3	11/17		normal
1070	SAL-107	B	ATXN3	11/24		normal
1082	SAL-108	B	ATXN3	17/18		normal
1083	SAL-1083	B	ATXN3	17/19		normal
1085	SAL-1085	B	ATXN3	19/20		normal
1086	SAL-1086	B	ATXN3	18/24		normal
1088	SAL-1088	B	ATXN3	20/20		normal
1089	SAL-1089	B	ATXN3	11/20		normal
1098	SAL-109	B	ATXN3	11/25		normal
1090	SAL-1090	B	ATXN3	17/18		normal
1	SAL-1100	B	ATXN3	11/20		normal
3	SAL-1100	B	ATXN3	20/20		normal
1101	SAL-1101	B	ATXN3	11/24		normal
113	SAL-113	B	ATXN3	11/17		normal
B0233	SAL-113	B	ATXN3	17/24		normal
4	SAL-1603	B	ATXN3	19/20		normal
B0117	SAL-1606	B	ATXN3	18/20		normal
2	SAL-2806	B	ATXN3	11/15		normal
18	SAL-315	B	ATXN3	11/11		normal
22	SAL-315	B	ATXN3	11/11		normal
24	SAL-315	B	ATXN3	11/11		normal
26	SAL-315	B	ATXN3	11/11		normal
32	SAL-315	B	ATXN3	11/23		normal
38	SAL-315	B	ATXN3	11/11		normal
40	SAL-315	B	ATXN3	11/20		normal
B0169	SAL-315	B	ATXN3	11/11		normal
646	SAL-646	B	ATXN3	11/11		normal
650	SAL-650	B	ATXN3	20/21		normal
654	SAL-654	B	ATXN3	23/41		normal
713	SAL-713	B	ATXN3	20/52	24/72	pathogenic
789	SAL-789	B	ATXN3	11/20		normal
4	SAL-866	B	ATXN3	11/18		normal
7	SAL-866	B	ATXN3	19/20		normal
872	SAL-872	B	ATXN3	19/20		normal
874	SAL-874	B	ATXN3	20/20		normal
878	SAL-878	B	ATXN3	11/18		normal
881	SAL-881	B	ATXN3	11/20		normal
883	SAL-883	B	ATXN3	18/18		normal

887	SAL-887	B	ATXN3	18/20		normal
891	SAL-891	B	ATXN3	20/20		normal
892	SAL-892	B	ATXN3	11/20		normal
893	SAL-893	B	ATXN3	24/25		normal
900	SAL-900	B	ATXN3	17/20		normal
901	SAL-901	B	ATXN3	20/23		normal
902	SAL-902	B	ATXN3	19/20		normal
905	SAL-905	B	ATXN3	20/20		normal
906	SAL-906	B	ATXN3	19/21		normal
1	SAL-919	B	ATXN3	11/20		normal
2	SAL-919	B	ATXN3	20/25		normal
919	SAL-919	B	ATXN3	20/25		normal
1	AAD-1004	A	ATXN7	11/13	11/13	normal
9	AAD-1007	A	ATXN7	10/10	11/11	normal
1	AAD-1008	A	ATXN7	10/10	11/11	normal
1	AAD-1011	A	ATXN7	10/10	10/11	normal
2	AAD-1011	A	ATXN7	10/13	11/13	normal
1	AAD-1012	A	ATXN7	11/11	11/13	normal
1	AAD-1014	A	ATXN7	10/10	10/10	normal
2	AAD-1014	A	ATXN7	10/10	10/10	normal
1	AAD-1015	A	ATXN7	10/10	10/10	normal
1	AAD-1017	A	ATXN7	10/10	10/10	normal
2	AAD-1017	A	ATXN7	9/10	10/10	normal
3	AAD-1017	A	ATXN7	10/10	10/10	normal
4	AAD-1017	A	ATXN7	10/10	10/10	normal
1	AAD-1019	A	ATXN7	10/13	10/13	normal
11	AAD-1020	A	ATXN7	10/10	10/10	normal
1	AAD-1021	A	ATXN7	10/10	10/10	normal
2	AAD-1021	A	ATXN7	10/10	11/11	normal
1	AAD-1023	A	ATXN7	10/10	10/10	normal
1	AAD-1024	A	ATXN7	10/10	10/10	normal
1	AAD-1031	A	ATXN7	10/12	10/12	normal
1	AAD-1032	A	ATXN7	10/10	10/10	normal
1	AAD-1035	A	ATXN7	10/10	11/11	normal
1	AAD-1036	A	ATXN7	10/10	10/11	normal
2	AAD-1036	A	ATXN7	12/13	12/13	normal
3	AAD-1036	A	ATXN7	10/12	10/12	normal
4	AAD-1036	A	ATXN7	10/10	10/10	normal
1	AAD-1038	A	ATXN7	10/10	10/10	normal
1	AAD-1040	A	ATXN7	10/12	10/12	normal
1	AAD-1043	A	ATXN7	9/10	10/11	normal
1	AAD-1044	A	ATXN7	10/13	10/14	normal
1	AAD-1046	A	ATXN7	10/10	10/10	normal
1	AAD-1048	A	ATXN7	10/10	10/10	normal
1	AAD-1050	A	ATXN7	10/10	10/10	normal

3	AAD-1050	A	ATXN7	10/10	10/10	normal
4	AAD-1050	A	ATXN7	10/10	11/11	normal
1	AAD-1051	A	ATXN7	10/10	10/10	normal
2	AAD-1051	A	ATXN7	10/12	10/12	normal
1	AAD-1052	A	ATXN7	12/12	12/12	normal
1	AAD-1058	A	ATXN7	10/12	10/12	normal
1	AAD-1059	A	ATXN7	10/10	10/10	normal
1	AAD-1061	A	ATXN7	10/10	10/10	normal
1	AAD-1063	A	ATXN7	10/10	10/10	normal
2	AAD-1063	A	ATXN7	10/12	10/12	normal
1	AAD-1064	A	ATXN7	10/10	10/10	normal
2	AAD-1064	A	ATXN7	10/10	10/10	normal
1	AAD-1065	A	ATXN7	10/10	10/10	normal
2	AAD-1065	A	ATXN7	10/13	10/13	normal
3	AAD-1065	A	ATXN7	10/13	10/13	normal
1	AAD-1067	A	ATXN7	10/13	10/13	normal
1	AAD-1068	A	ATXN7	10/10	10/10	normal
1	AAD-1072	A	ATXN7	10/10	10/10	normal
1	AAD-1074	A	ATXN7	10/13	11/13	normal
1	AAD-1079	A	ATXN7	10/12	11/12	normal
1	AAD-1082	A	ATXN7	9/10	10/10	normal
1	AAD-1085	A	ATXN7	10/10	10/10	normal
1	AAD-1087	A	ATXN7	10/12	10/12	normal
1	AAD-1088	A	ATXN7	10/10	10/10	normal
1	AAD-1089	A	ATXN7	10/10	10/10	normal
1	AAD-1090	A	ATXN7	10/10	10/10	normal
1	AAD-1091	A	ATXN7	10/10	10/10	normal
1	AAD-1093	A	ATXN7	10/10	10/10	normal
1	AAD-1096	A	ATXN7	10/13	10/13	normal
1	AAD-1097	A	ATXN7	10/12	10/12	normal
1	AAD-1101	A	ATXN7	10/10	10/10	normal
1	AAD-1102	A	ATXN7	10/10	10/10	normal
1	AAD-1103	A	ATXN7	10/10	10/10	normal
1	AAD-1104	A	ATXN7	10/13	11/14	normal
1	AAD-1105	A	ATXN7	11/11	11/11	normal
1	AAD-1107	A	ATXN7	10/10	10/10	normal
1	AAD-1108	A	ATXN7	10/11	10/11	normal
1	AAD-1110	A	ATXN7	10/10	11/11	normal
1	AAD-1111	A	ATXN7	10/10	10/10	normal
1	AAD-1112	A	ATXN7	10/10	10/10	normal
2	AAD-1112	A	ATXN7	10/10	10/10	normal
1	AAD-1114	A	ATXN7	10/10	10/11	normal
1	AAD-1115	A	ATXN7	10/10	10/10	normal
1	AAD-1119	A	ATXN7	10/13	10/13	normal
1	AAD-1121	A	ATXN7	10/10	11/11	normal

2	AAD-1121	A	ATXN7	10/12	10/12	normal
1	AAD-1123	A	ATXN7	10/12	10/12	normal
1	AAD-1124	A	ATXN7	10/10	10/10	normal
1	AAD-1125	A	ATXN7	10/14	10/14	normal
1	AAD-1127	A	ATXN7	10/10	10/10	normal
1	AAD-1130	A	ATXN7	10/12	10/12	normal
1	AAD-1131	A	ATXN7	12/12	12/13	normal
1	AAD-1133	A	ATXN7	10/10	11/11	normal
1	AAD-1148	A	ATXN7	10/10	10/12	normal
2	AAD-1148	A	ATXN7	10/10	11/11	normal
4	AAD-1148	A	ATXN7	10/10	10/10	normal
1	AAD-1150	A	ATXN7	3/4	11/11	normal
1	AAD-1154	A	ATXN7	12/13	12/13	normal
1	AAD-1155	A	ATXN7	10/10	10/10	normal
1	AAD-1156	A	ATXN7	10/10	10/10	normal
1	AAD-1158	A	ATXN7	10/13	11/13	normal
1	AAD-1160	A	ATXN7	10/10	10/10	normal
1	AAD-1161	A	ATXN7	10/10	10/10	normal
1	AAD-1163	A	ATXN7	9/10	10/10	normal
1	AAD-1164	A	ATXN7	10/10	10/10	normal
1	AAD-1165	A	ATXN7	10/12	10/12	normal
1	AAD-1171	A	ATXN7	10/10	11/11	normal
1	AAD-1172	A	ATXN7	10/10	10/10	normal
1	AAD-1173	A	ATXN7	10/10	10/10	normal
1	AAD-1175	A	ATXN7	10/10	10/11	normal
1	AAD-1176	A	ATXN7	10/13	10/13	normal
1	AAD-1178	A	ATXN7	10/10	10/10	normal
1	AAD-1179	A	ATXN7	10/10	10/10	normal
2	AAD-1179	A	ATXN7	10/10	10/10	normal
1	AAD-1181	A	ATXN7	10/10	10/10	normal
1	AAD-1184	A	ATXN7	10/10	10/10	normal
1	AAD-1185	A	ATXN7	10/10	10/10	normal
1	AAD-1190	A	ATXN7	10/12	10/12	normal
1	AAD-1191	A	ATXN7	10/10	10/10	normal
1	AAD-1192	A	ATXN7	10/10	10/10	normal
1	AAD-1194	A	ATXN7	10/13	10/13	normal
1	AAD-1195	A	ATXN7	10/12	11/12	normal
1	AAD-1198	A	ATXN7	10/12	11/13	normal
1	AAD-1201	A	ATXN7	10/10	10/11	normal
1	AAD-1205	A	ATXN7	10/12	10/12	normal
1	AAD-1206	A	ATXN7	7/10	7/10	normal
1	AAD-1220	A	ATXN7	10/10	10/10	normal
1	AAD-1221	A	ATXN7	10/13	11/14	normal
3	AAD-1247	A	ATXN7	12/13	12/13	normal
10	AAD-1251	A	ATXN7	10/10	10/10	normal

3	AAD-1267	A	ATXN7	10/10	10/10	normal
2	AAD-1269	A	ATXN7	10/12	10/12	normal
4	AAD-1269	A	ATXN7	10/12	11/12	normal
5	AAD-1271	A	ATXN7	10/10	10/10	normal
13	AAD-1280	A	ATXN7	10/10	10/10	normal
4	AAD-1285	A	ATXN7	10/10	10/10	normal
3	AAD-1288	A	ATXN7	10/12	10/12	normal
2	AAD-1291	A	ATXN7	10/10	11/11	normal
3	AAD-1294	A	ATXN7	9/10	10/10	normal
3	AAD-1296	A	ATXN7	10/13	10/13	normal
3	AAD-1299	A	ATXN7	10/10	10/10	normal
2	AAD-1300	A	ATXN7	10/10	11/11	normal
8	AAD-1302	A	ATXN7	10/10	10/10	normal
1	AAD-1303	A	ATXN7	10/12	10/12	normal
1	AAD-1304	A	ATXN7	10/10	10/10	normal
2	AAD-1304	A	ATXN7	10/10	10/10	normal
5	AAD-1306	A	ATXN7	10/10	10/10	normal
5	AAD-1309	A	ATXN7	10/10	10/10	normal
6	AAD-1310	A	ATXN7	11/12	11/12	normal
4	AAD-1316	A	ATXN7	10/12	10/12	normal
2	AAD-1320	A	ATXN7	10/10	10/10	normal
1	AAD-1323	A	ATXN7	10/13	10/13	normal
3	AAD-1324	A	ATXN7	10/12	10/12	normal
6	AAD-1325	A	ATXN7	10/10	10/10	normal
1	AAD-1326	A	ATXN7	10/10	10/10	normal
2	AAD-1326	A	ATXN7	10/13	10/13	normal
5	AAD-1328	A	ATXN7	10/12	10/12	normal
2	AAD-1329	A	ATXN7	7/10	7/11	normal
10	AAD-1330	A	ATXN7	10/10	10/10	normal
6	AAD-1332	A	ATXN7	10/10	10/10	normal
3	AAD-1333	A	ATXN7	10/10	10/10	normal
7	AAD-1335	A	ATXN7	10/12	10/12	normal
2	AAD-1336	A	ATXN7	10/10	10/10	normal
2	AAD-1340	A	ATXN7	10/12	10/12	normal
7	AAD-1341	A	ATXN7	10/12	10/12	normal
2	AAD-1342	A	ATXN7	10/10	10/10	normal
5	AAD-1347	A	ATXN7	10/12	10/12	normal
4	AAD-1349	A	ATXN7	10/10	10/10	normal
3	AAD-1350	A	ATXN7	10/10	10/10	normal
4	AAD-1351	A	ATXN7	8/10	8/10	normal
3	AAD-1352	A	ATXN7	10/12	10/12	normal
7	AAD-1352	A	ATXN7	10/10	10/10	normal
1	AAD-1353	A	ATXN7	11/13	11/13	normal
1	AAD-1354	A	ATXN7	10/13	10/13	normal
3	AAD-1355	A	ATXN7	10/10	10/11	normal

5	AAD-1356	A	ATXN7	10/10	10/10	normal
7	AAD-1358	A	ATXN7	10/12	10/12	normal
4	AAD-1359	A	ATXN7	10/12	10/12	normal
5	AAD-1360	A	ATXN7	10/10	10/10	normal
13	AAD-1362	A	ATXN7	10/11	10/11	normal
4	AAD-1363	A	ATXN7	10/12	10/12	normal
5	AAD-1364	A	ATXN7	10/13	10/13	normal
1	AAD-1367	A	ATXN7	10/10	10/10	normal
3	AAD-1371	A	ATXN7	10/12	11/12	normal
1	AAD-1378	A	ATXN7	10/13	10/13	normal
1	AAD-1379	A	ATXN7	10/13	10/13	normal
1	AAD-1380	A	ATXN7	10/10	10/10	normal
1	AAD-1383	A	ATXN7	12/13	12/13	normal
1	AAD-1385	A	ATXN7	10/12	11/12	normal
7	AAD-1386	A	ATXN7	10/10	10/10	normal
8	AAD-1387	A	ATXN7	10/13	10/13	normal
1	AAD-1398	A	ATXN7	7/10	8/10	normal
3	AAD-1398	A	ATXN7	7/12	7/12	normal
346	AAD-1398	A	ATXN7	7/12	8/12	normal
1	AAD-1407	A	ATXN7	10/10	11/11	normal
1	AAD-1410	A	ATXN7	10/10	10/10	normal
9	AAD-386	A	ATXN7	11/12	11/12	normal
7	AAD-481	A	ATXN7	10/10	10/10	normal
10	AAD-481	A	ATXN7	10/10	10/10	normal
3	AAD-723	A	ATXN7	10/13	10/13	normal
13	AAD-723	A	ATXN7	12/13	12/13	normal
7	AAD-726	A	ATXN7	10/10	10/10	normal
10	AAD-729	A	ATXN7	10/12	10/12	normal
5	AAD-736	A	ATXN7	10/13	10/13	normal
3	AAD-928	A	ATXN7	10/10	11/12	normal
20	AAD-928	A	ATXN7	10/10	10/10	normal
8	AAD-935	A	ATXN7	10/10	11/11	normal
1	AAD-952	A	ATXN7	10/10	10/10	normal
1	AAD-958	A	ATXN7	10/12	10/12	normal
7	AAD-960	A	ATXN7	10/10	10/10	normal
20	AAD-960	A	ATXN7	10/10	10/10	normal
1	AAD-961	A	ATXN7	10/11	10/11	normal
2	AAD-961	A	ATXN7	10/11	10/11	normal
1	AAD-963	A	ATXN7	10/10	10/10	normal
1	AAD-966	A	ATXN7	10/10	10/10	normal
6	AAD-967	A	ATXN7	10/10	10/10	normal
8	AAD-967	A	ATXN7	10/11	10/11	normal
1	AAD-968	A	ATXN7	10/13	10/13	normal
1	AAD-972	A	ATXN7	10/10	10/10	normal
2	AAD-972	A	ATXN7	10/10	10/10	normal

4	AAD-973	A	ATXN7	10/12	10/12	normal
1	AAD-976	A	ATXN7	10/10	10/10	normal
2	AAD-976	A	ATXN7	10/10	10/10	normal
1	AAD-978	A	ATXN7	10/10	10/10	normal
6	AAD-979	A	ATXN7	10/13	10/13	normal
5	AAD-997	A	ATXN7	10/12	10/12	normal
6	AAD-997	A	ATXN7	10/10	10/10	normal
8	AAD-997	A	ATXN7	10/12	10/12	normal
1	AAD-999	A	ATXN7	10/10	10/10	normal
7	AAR-319	A	ATXN7	10/10	10/10	normal
1	AAR-549	A	ATXN7	10/12	10/12	normal
3	AAR-875	A	ATXN7	10/12	10/12	normal
3	AAR-880	A	ATXN7	9/10	10/10	normal
5	AAR-886	A	ATXN7	10/10	10/10	normal
3	AAR-887	A	ATXN7	10/13	11/14	normal
1	AAR-895	A	ATXN7	10/11	10/11	normal
24	FPD-1051	A	ATXN7	10/13	10/13	normal
1	FSP-1177	A	ATXN7	10/10	11/11	normal
5	FSP-1304	A	ATXN7	10/10	10/10	normal
1	FSP-1305	A	ATXN7	10/12	10/12	normal
2	FSP-1305	A	ATXN7	10/13	10/13	normal
1	FSP-1307	A	ATXN7	10/10	10/10	normal
7	FSP-1308	A	ATXN7	12/12	12/12	normal
11	FSP-1308	A	ATXN7	10/12	10/12	normal
3	FSP-403	A	ATXN7	10/11	10/11	normal
25	SAL-025	A	ATXN7	10/10	10/10	normal
1069	SAL-1069	A	ATXN7	10/10	10/10	normal
167	SAL-167	A	ATXN7	10/10	10/10	normal
4	SAL-307	A	ATXN7	10/13	10/13	normal
5	SAL-307	A	ATXN7	10/13	10/13	normal
7	SAL-307	A	ATXN7	10/13	10/13	normal
780	SAL-780	A	ATXN7	10/10	10/10	normal
904	SAL-904	A	ATXN7	10/12	10/12	normal
995	SAL-995	A	ATXN7	10/12	10/12	normal
13	AAD-1020	B	ATXN7	10/10		normal
1	AAD-1045	B	ATXN7	10/10		normal
1	AAD-1159	B	ATXN7	10/12		normal
B0152	AAD-1213	B	ATXN7	10/10		normal
B0153	AAD-1213	B	ATXN7	10/12		normal
9	AAD-1249	B	ATXN7	9/10		normal
1	AAD-1250	B	ATXN7	10/10		normal
B0254	AAD-1261	B	ATXN7	10/12		normal
1	AAD-1274	B	ATXN7	10/10		normal
1	AAD-1389	B	ATXN7	10/10		normal
10	AAD-139	B	ATXN7	10/10		normal

B0006	AAD-1397	B	ATXN7	10/10		normal
3	AAD-1399	B	ATXN7	10/12		normal
2	AAD-1421	B	ATXN7	10/10		normal
9	AAD-369	B	ATXN7	10/12		normal
3	AAD-377	B	ATXN7	11/12		normal
3	AAD-533	B	ATXN7	9/10		normal
6	AAD-566	B	ATXN7	10/13		normal
9	AAD-566	B	ATXN7	10/13		normal
10	AAD-566	B	ATXN7	10/10		normal
7	AAD-569	B	ATXN7	10/10		normal
5	AAD-635	B	ATXN7	10/10		normal
10	AAD-683	B	ATXN7	10/10		normal
12	AAD-683	B	ATXN7	10/10		normal
14	AAD-683	B	ATXN7	10/10		normal
15	AAD-683	B	ATXN7	10/10		normal
16	AAD-683	B	ATXN7	10/10		normal
5	AAD-743	B	ATXN7	9/10		normal
7	AAD-743	B	ATXN7	10/10		normal
B0080	AAD-743	B	ATXN7	10/10		normal
7	AAD-748	B	ATXN7	10/12		normal
1	AAD-834	B	ATXN7	10/13		normal
8	AAD-861	B	ATXN7	10/37	10/36	pathogenic
4	AAD-891	B	ATXN7	10/13		normal
23	AAD-908	B	ATXN7	10/11		normal
B0079	AAD-908	B	ATXN7	11/17		normal
B0083	AAD-949	B	ATXN7	10/10		normal
8	AAD-971	B	ATXN7	10/10		normal
3	AAR-242	B	ATXN7	10/11		normal
5	AAR-500	B	ATXN7	10/10		normal
16	AAR-512	B	ATXN7	10/12		normal
1	AAR-676	B	ATXN7	10/10		normal
1	AAR-740	B	ATXN7	9/10		normal
B0149	AAR-860	B	ATXN7	12/12		normal
B0229	AAR-895	B	ATXN7	10/11		normal
10	AAR-912	B	ATXN7	10/10		normal
B0194	AGE-028	B	ATXN7	10/11		normal
B0039	B0039	B	ATXN7	9/10		normal
B0040	B0040	B	ATXN7	12/13		normal
B0047	B0047	B	ATXN7	10/10		normal
B0071	B0071	B	ATXN7	10/10		normal
B0126	B0126	B	ATXN7	10/11		normal
B0146	B0146	B	ATXN7	9/10		normal
B0164	B0164	B	ATXN7	10/10		normal
B0168	B0168	B	ATXN7	10/10		normal
B0171	B0171	B	ATXN7	10/10		normal

B0198	B0198	B	ATXN7	10/10		normal
B0199	B0199	B	ATXN7	9/10		normal
B0215	B0215	B	ATXN7	12/13		normal
B0244	B0244	B	ATXN7	9/10		normal
B0247	B0247	B	ATXN7	10/11		normal
B0250	B0250	B	ATXN7	10/11		normal
B0253	B0253	B	ATXN7	10/10		normal
B0278	B0278	B	ATXN7	10/10		normal
1	CMT-234	B	ATXN7	9/10		normal
4	CMT-234	B	ATXN7	10/10		normal
16	CMT-234	B	ATXN7	7/10		normal
1	DFT-315	B	ATXN7	10/10		normal
9	DFT-326	B	ATXN7	10/10		normal
18	ENE-013	B	ATXN7	10/10		normal
9	FSP-006	B	ATXN7	9/10		normal
11	FSP-006	B	ATXN7	10/13		normal
13	FSP-006	B	ATXN7	10/10		normal
14	FSP-006	B	ATXN7	10/10		normal
20	FSP-056	B	ATXN7	9/10		normal
21	FSP-056	B	ATXN7	10/10		normal
1	FSP-078	B	ATXN7	10/10		normal
13	FSP-088	B	ATXN7	10/12		normal
1	FSP-1009	B	ATXN7	10/10		normal
4	FSP-1044	B	ATXN7	10/12		normal
1	FSP-1048	B	ATXN7	10/12		normal
5	FSP-1057	B	ATXN7	12/12		normal
7	FSP-1057	B	ATXN7	10/10		normal
8	FSP-1059	B	ATXN7	10/10		normal
1	FSP-1060	B	ATXN7	10/10		normal
4	FSP-1062	B	ATXN7	10/11		normal
1	FSP-1063	B	ATXN7	10/12		normal
5	FSP-1064	B	ATXN7	10/10		normal
6	FSP-1065	B	ATXN7	10/10		normal
6	FSP-1066	B	ATXN7	10/10		normal
3	FSP-1067	B	ATXN7	10/10		normal
12	FSP-1070	B	ATXN7	11/12		normal
3	FSP-1071	B	ATXN7	10/10		normal
11	FSP-1072	B	ATXN7	10/12		normal
1	FSP-1073	B	ATXN7	9/10		normal
10	FSP-1073	B	ATXN7	10/10		normal
1	FSP-1076	B	ATXN7	10/10		normal
9	FSP-1081	B	ATXN7	10/10		normal
3	FSP-1096	B	ATXN7	10/10		normal
5	FSP-1098	B	ATXN7	10/12		normal
4	FSP-1100	B	ATXN7	10/11		normal

4	FSP-1101	B	ATXN7	10/10		normal
1	FSP-1102	B	ATXN7	9/10		normal
3	FSP-1105	B	ATXN7	12/13		normal
3	FSP-1107	B	ATXN7	10/10		normal
4	FSP-1109	B	ATXN7	10/10		normal
7	FSP-1110	B	ATXN7	9/10		normal
7	FSP-1111	B	ATXN7	10/10		normal
3	FSP-1113	B	ATXN7	10/10		normal
1	FSP-1117	B	ATXN7	10/10		normal
4	FSP-1120	B	ATXN7	10/13		normal
1	FSP-1124	B	ATXN7	10/10		normal
2	FSP-1124	B	ATXN7	10/10		normal
22	FSP-1130	B	ATXN7	9/10		normal
15	FSP-1131	B	ATXN7	10/10		normal
3	FSP-1136	B	ATXN7	10/10		normal
1	FSP-1145	B	ATXN7	10/12		normal
4	FSP-1147	B	ATXN7	10/10		normal
3	FSP-1148	B	ATXN7	7/10		normal
1	FSP-1149	B	ATXN7	13/13		normal
1	FSP-1151	B	ATXN7	10/12		normal
4	FSP-1152	B	ATXN7	10/13		normal
5	FSP-1153	B	ATXN7	10/10		normal
1	FSP-1155	B	ATXN7	10/10		normal
1	FSP-1157	B	ATXN7	10/12		normal
1	FSP-1164	B	ATXN7	10/13		normal
1	FSP-1171	B	ATXN7	10/12		normal
3	FSP-1172	B	ATXN7	10/13		normal
3	FSP-1174	B	ATXN7	10/10		normal
1	FSP-1176	B	ATXN7	10/10		normal
3	FSP-1178	B	ATXN7	10/10		normal
1	FSP-1179	B	ATXN7	10/11		normal
7	FSP-1181	B	ATXN7	9/10		normal
1	FSP-1182	B	ATXN7	10/10		normal
1	FSP-1185	B	ATXN7	9/10		normal
1	FSP-1186	B	ATXN7	8/10		normal
1	FSP-1187	B	ATXN7	10/11		normal
1	FSP-1188	B	ATXN7	10/10		normal
1	FSP-1189	B	ATXN7	10/10		normal
1	FSP-1191	B	ATXN7	10/10		normal
1	FSP-1193	B	ATXN7	10/10		normal
1	FSP-1194	B	ATXN7	10/10		normal
1	FSP-1288	B	ATXN7	10/10		normal
2	FSP-1308	B	ATXN7	10/12		normal
3	FSP-1308	B	ATXN7	9/10		normal
1	FSP-1359	B	ATXN7	10/10		normal

1	FSP-1426	B	ATXN7	10/12		normal
1	FSP-1433	B	ATXN7	10/12		normal
2	FSP-1452	B	ATXN7	10/10		normal
1	FSP-1455	B	ATXN7	9/10		normal
1	FSP-1458	B	ATXN7	9/10		normal
1	FSP-1459	B	ATXN7	10/10		normal
1	FSP-1467	B	ATXN7	9/10		normal
1	FSP-1470	B	ATXN7	9/11		normal
1	FSP-1480	B	ATXN7	10/12		normal
1	FSP-1482	B	ATXN7	10/11		normal
1	FSP-1499	B	ATXN7	10/10		normal
1	FSP-1500	B	ATXN7	10/10		normal
1	FSP-1506	B	ATXN7	10/10		normal
1	FSP-1507	B	ATXN7	10/13		normal
2	FSP-1507	B	ATXN7	10/10		normal
1	FSP-1509	B	ATXN7	10/10		normal
1	FSP-1510	B	ATXN7	9/10		normal
1	FSP-1515	B	ATXN7	10/10		normal
1	FSP-1529	B	ATXN7	10/10		normal
1	FSP-1531	B	ATXN7	10/10		normal
1	FSP-1537	B	ATXN7	10/12		normal
1	FSP-1540	B	ATXN7	9/10		normal
1	FSP-1544	B	ATXN7	10/11		normal
1	FSP-1546	B	ATXN7	10/10		normal
B0110	FSP-1547	B	ATXN7	10/12		normal
1	FSP-1548	B	ATXN7	10/10		normal
1	FSP-1558	B	ATXN7	10/10		normal
1	FSP-1560	B	ATXN7	10/12		normal
4	FSP-1568	B	ATXN7	10/12		normal
5	FSP-1568	B	ATXN7	9/12		normal
2	FSP-1569	B	ATXN7	10/11		normal
B0022	FSP-1570	B	ATXN7	10/10		normal
3	FSP-1573	B	ATXN7	10/10		normal
5	FSP-1576	B	ATXN7	9/10		normal
1	FSP-1579	B	ATXN7	8/10		normal
6	FSP-1582	B	ATXN7	10/11		normal
8	FSP-1582	B	ATXN7	2/2		normal
3	FSP-1584	B	ATXN7	10/10		normal
10	FSP-1585	B	ATXN7	10/12		normal
1	FSP-1586	B	ATXN7	10/12		normal
2	FSP-1588	B	ATXN7	10/10		normal
4	FSP-1592	B	ATXN7	10/12		normal
1	FSP-1593	B	ATXN7	10/12		normal
3	FSP-1593	B	ATXN7	10/10		normal
13	FSP-1594	B	ATXN7	9/10		normal

6	FSP-1595	B	ATXN7	9/10		normal
7	FSP-1600	B	ATXN7	10/10		normal
6	FSP-1634	B	ATXN7	10/10		normal
2	FSP-1636	B	ATXN7	12/12		normal
3	FSP-1638	B	ATXN7	10/10		normal
B0037	FSP-258	B	ATXN7	10/10		normal
10	FSP-405	B	ATXN7	10/10		normal
11	FSP-455	B	ATXN7	10/10		normal
B0241	FSP-491	B	ATXN7	10/10		normal
B0182	FSP-820	B	ATXN7	10/10		normal
18	FSP-929	B	ATXN7	10/10		normal
6	FSP-985	B	ATXN7	10/10		normal
4	ITD-539	B	ATXN7	10/12		normal
10	ITD-868	B	ATXN7	10/10		normal
B0068	ITD-868	B	ATXN7	10/12		normal
B0109	PED-1526	B	ATXN7	10/13		normal
1057	SAL-105	B	ATXN7	10/10		normal
1053	SAL-1053	B	ATXN7	9/10		normal
1070	SAL-107	B	ATXN7	10/13		normal
1082	SAL-108	B	ATXN7	10/10		normal
1083	SAL-1083	B	ATXN7	10/10		normal
1085	SAL-1085	B	ATXN7	10/11		normal
1086	SAL-1086	B	ATXN7	10/10		normal
1088	SAL-1088	B	ATXN7	10/13		normal
1089	SAL-1089	B	ATXN7	10/10		normal
1098	SAL-109	B	ATXN7	10/10		normal
1090	SAL-1090	B	ATXN7	10/10		normal
1	SAL-1100	B	ATXN7	6/6		normal
3	SAL-1100	B	ATXN7	9/10		normal
1101	SAL-1101	B	ATXN7	10/10		normal
113	SAL-113	B	ATXN7	10/10		normal
B0233	SAL-113	B	ATXN7	10/12		normal
4	SAL-1603	B	ATXN7	12/12		normal
B0117	SAL-1606	B	ATXN7	10/10		normal
2	SAL-2806	B	ATXN7	10/11		normal
18	SAL-315	B	ATXN7	9/10		normal
22	SAL-315	B	ATXN7	9/10		normal
24	SAL-315	B	ATXN7	10/10		normal
26	SAL-315	B	ATXN7	10/10		normal
32	SAL-315	B	ATXN7	10/10		normal
38	SAL-315	B	ATXN7	10/12		normal
40	SAL-315	B	ATXN7	10/10		normal
B0169	SAL-315	B	ATXN7	10/12		normal
646	SAL-646	B	ATXN7	9/10		normal
650	SAL-650	B	ATXN7	10/10		normal

654	SAL-654	B	ATXN7	9/10		normal
713	SAL-713	B	ATXN7	10/13		normal
789	SAL-789	B	ATXN7	10/10		normal
4	SAL-866	B	ATXN7	10/11		normal
7	SAL-866	B	ATXN7	10/10		normal
872	SAL-872	B	ATXN7	10/12		normal
874	SAL-874	B	ATXN7	9/10		normal
878	SAL-878	B	ATXN7	10/10		normal
881	SAL-881	B	ATXN7	10/10		normal
883	SAL-883	B	ATXN7	10/10		normal
887	SAL-887	B	ATXN7	10/10		normal
891	SAL-891	B	ATXN7	10/12		normal
892	SAL-892	B	ATXN7	8/10		normal
893	SAL-893	B	ATXN7	10/11		normal
900	SAL-900	B	ATXN7	10/10		normal
901	SAL-901	B	ATXN7	0/0		normal
902	SAL-902	B	ATXN7	9/10		normal
905	SAL-905	B	ATXN7	10/10		normal
906	SAL-906	B	ATXN7	10/10		normal
1	SAL-919	B	ATXN7	10/10		normal
2	SAL-919	B	ATXN7	10/10		normal
919	SAL-919	B	ATXN7	10/10		normal
1	AAD-1004	A	CACNA1A	7/12	7/12	normal
9	AAD-1007	A	CACNA1A	4/13	4/13	normal
1	AAD-1008	A	CACNA1A	11/13	11/13	normal
1	AAD-1011	A	CACNA1A	7/12	7/12	normal
2	AAD-1011	A	CACNA1A	7/13	7/13	normal
1	AAD-1012	A	CACNA1A	11/13	11/13	normal
1	AAD-1014	A	CACNA1A	11/12	11/12	normal
2	AAD-1014	A	CACNA1A	11/12	11/12	normal
1	AAD-1015	A	CACNA1A	12/13	12/13	normal
1	AAD-1017	A	CACNA1A	11/12	11/12	normal
2	AAD-1017	A	CACNA1A	12/13	12/13	normal
3	AAD-1017	A	CACNA1A	11/12	11/12	normal
4	AAD-1017	A	CACNA1A	13/13	13/13	normal
1	AAD-1019	A	CACNA1A	11/13	11/13	normal
11	AAD-1020	A	CACNA1A	11/11	11/11	normal
1	AAD-1021	A	CACNA1A	11/12	11/12	normal
2	AAD-1021	A	CACNA1A	11/12	11/12	normal
1	AAD-1023	A	CACNA1A	11/14	11/14	normal
1	AAD-1024	A	CACNA1A	11/11	11/11	normal
1	AAD-1031	A	CACNA1A	12/13	12/13	normal
1	AAD-1032	A	CACNA1A	12/12	12/12	normal
1	AAD-1035	A	CACNA1A	11/14	11/14	normal
1	AAD-1036	A	CACNA1A	11/11	11/11	normal

2	AAD-1036	A	CACNA1A	7/13	7/13	normal
3	AAD-1036	A	CACNA1A	11/13	11/13	normal
4	AAD-1036	A	CACNA1A	7/13	7/13	normal
1	AAD-1038	A	CACNA1A	13/13	13/13	normal
1	AAD-1040	A	CACNA1A	11/11	11/11	normal
1	AAD-1043	A	CACNA1A	11/11	11/11	normal
1	AAD-1044	A	CACNA1A	12/13	12/13	normal
1	AAD-1046	A	CACNA1A	11/13	11/13	normal
1	AAD-1048	A	CACNA1A	11/13	11/13	normal
1	AAD-1050	A	CACNA1A	11/12	11/12	normal
3	AAD-1050	A	CACNA1A	11/12	11/12	normal
4	AAD-1050	A	CACNA1A	11/11	11/11	normal
1	AAD-1051	A	CACNA1A	11/12	11/12	normal
2	AAD-1051	A	CACNA1A	13/14	13/14	normal
1	AAD-1052	A	CACNA1A	11/12	11/12	normal
1	AAD-1058	A	CACNA1A	12/13	12/13	normal
1	AAD-1059	A	CACNA1A	11/12	11/12	normal
1	AAD-1061	A	CACNA1A	12/13	12/13	normal
1	AAD-1063	A	CACNA1A	7/7	7/7	normal
2	AAD-1063	A	CACNA1A	7/11	7/11	normal
1	AAD-1064	A	CACNA1A	12/13	12/13	normal
2	AAD-1064	A	CACNA1A	11/12	11/12	normal
1	AAD-1065	A	CACNA1A	11/12	11/12	normal
2	AAD-1065	A	CACNA1A	12/12	12/12	normal
3	AAD-1065	A	CACNA1A	11/12	11/12	normal
1	AAD-1067	A	CACNA1A	7/13	7/13	normal
1	AAD-1068	A	CACNA1A	11/13	11/13	normal
1	AAD-1072	A	CACNA1A	7/7	7/7	normal
1	AAD-1074	A	CACNA1A	11/12	11/12	normal
1	AAD-1079	A	CACNA1A	11/13	11/13	normal
1	AAD-1082	A	CACNA1A	11/14	11/14	normal
1	AAD-1085	A	CACNA1A	11/11	11/11	normal
1	AAD-1087	A	CACNA1A	11/12	11/12	normal
1	AAD-1088	A	CACNA1A	13/13	13/13	normal
1	AAD-1089	A	CACNA1A	11/12	11/12	normal
1	AAD-1090	A	CACNA1A	7/13	7/13	normal
1	AAD-1091	A	CACNA1A	11/13	11/13	normal
1	AAD-1093	A	CACNA1A	11/13	11/13	normal
1	AAD-1096	A	CACNA1A	11/13	11/13	normal
1	AAD-1097	A	CACNA1A	13/13	13/13	normal
1	AAD-1101	A	CACNA1A	7/12	7/12	normal
1	AAD-1102	A	CACNA1A	11/12	11/12	normal
1	AAD-1103	A	CACNA1A	12/13	12/13	normal
1	AAD-1104	A	CACNA1A	13/14	13/14	normal
1	AAD-1105	A	CACNA1A	11/13	11/13	normal

1	AAD-1107	A	CACNA1A	12/12	12/12	normal
1	AAD-1108	A	CACNA1A	11/12	11/12	normal
1	AAD-1110	A	CACNA1A	11/14	11/14	normal
1	AAD-1111	A	CACNA1A	11/11	11/11	normal
1	AAD-1112	A	CACNA1A	11/12	11/12	normal
2	AAD-1112	A	CACNA1A	12/14	12/14	normal
1	AAD-1114	A	CACNA1A	7/14	7/14	normal
1	AAD-1115	A	CACNA1A	13/16	13/16	normal
1	AAD-1119	A	CACNA1A	11/14	11/14	normal
1	AAD-1121	A	CACNA1A	12/12	12/12	normal
2	AAD-1121	A	CACNA1A	11/12	11/12	normal
1	AAD-1123	A	CACNA1A	11/12	11/12	normal
1	AAD-1124	A	CACNA1A	12/13	12/13	normal
1	AAD-1125	A	CACNA1A	7/11	7/11	normal
1	AAD-1127	A	CACNA1A	11/13	11/13	normal
1	AAD-1130	A	CACNA1A	7/13	7/13	normal
1	AAD-1131	A	CACNA1A	11/12	11/12	normal
1	AAD-1133	A	CACNA1A	11/13	11/13	normal
1	AAD-1148	A	CACNA1A	11/11	7/11	normal
2	AAD-1148	A	CACNA1A	11/13	11/13	normal
4	AAD-1148	A	CACNA1A	11/12	11/12	normal
1	AAD-1150	A	CACNA1A	11/13	11/13	normal
1	AAD-1154	A	CACNA1A	12/13	13/13	normal
1	AAD-1155	A	CACNA1A	13/13	13/13	normal
1	AAD-1156	A	CACNA1A	13/13	13/13	normal
1	AAD-1158	A	CACNA1A	11/12	11/12	normal
1	AAD-1160	A	CACNA1A	13/13	13/13	normal
1	AAD-1161	A	CACNA1A	11/11	11/11	normal
1	AAD-1163	A	CACNA1A	12/13	12/13	normal
1	AAD-1164	A	CACNA1A	11/12	11/12	normal
1	AAD-1165	A	CACNA1A	11/11	11/11	normal
1	AAD-1171	A	CACNA1A	12/13	12/13	normal
1	AAD-1172	A	CACNA1A	7/13	7/13	normal
1	AAD-1173	A	CACNA1A	11/11	11/11	normal
1	AAD-1175	A	CACNA1A	11/13	11/13	normal
1	AAD-1176	A	CACNA1A	11/12	11/12	normal
1	AAD-1178	A	CACNA1A	11/13	11/13	normal
1	AAD-1179	A	CACNA1A	11/13	11/13	normal
2	AAD-1179	A	CACNA1A	11/13	11/13	normal
1	AAD-1181	A	CACNA1A	12/12	12/12	normal
1	AAD-1184	A	CACNA1A	11/12	11/12	normal
1	AAD-1185	A	CACNA1A	13/14	13/14	normal
1	AAD-1190	A	CACNA1A	11/12	11/12	normal
1	AAD-1191	A	CACNA1A	12/13	12/13	normal
1	AAD-1192	A	CACNA1A	11/11	11/11	normal

1	AAD-1194	A	CACNA1A	11/12	11/12	normal
1	AAD-1195	A	CACNA1A	11/13	11/13	normal
1	AAD-1198	A	CACNA1A	11/14	11/14	normal
1	AAD-1201	A	CACNA1A	13/13	13/13	normal
1	AAD-1205	A	CACNA1A	11/13	11/13	normal
1	AAD-1206	A	CACNA1A	11/13	11/13	normal
1	AAD-1220	A	CACNA1A	11/13	11/13	normal
1	AAD-1221	A	CACNA1A	11/13	11/13	normal
3	AAD-1247	A	CACNA1A	7/11	7/11	normal
10	AAD-1251	A	CACNA1A	7/13	7/13	normal
3	AAD-1267	A	CACNA1A	7/11	7/11	normal
2	AAD-1269	A	CACNA1A	11/13	11/13	normal
4	AAD-1269	A	CACNA1A	11/12	11/12	normal
5	AAD-1271	A	CACNA1A	7/11	7/11	normal
13	AAD-1280	A	CACNA1A	11/13	11/13	normal
4	AAD-1285	A	CACNA1A	11/12	11/12	normal
3	AAD-1288	A	CACNA1A	11/12	11/12	normal
2	AAD-1291	A	CACNA1A	11/13	11/13	normal
3	AAD-1294	A	CACNA1A	11/13	11/13	normal
3	AAD-1296	A	CACNA1A	11/13	11/13	normal
3	AAD-1299	A	CACNA1A	13/14	13/14	normal
2	AAD-1300	A	CACNA1A	11/12	11/12	normal
8	AAD-1302	A	CACNA1A	11/13	11/13	normal
1	AAD-1303	A	CACNA1A	11/12	11/12	normal
1	AAD-1304	A	CACNA1A	13/13	13/13	normal
2	AAD-1304	A	CACNA1A	7/13	7/13	normal
5	AAD-1306	A	CACNA1A	11/13	11/13	normal
5	AAD-1309	A	CACNA1A	12/13	12/13	normal
6	AAD-1310	A	CACNA1A	11/13	11/13	normal
4	AAD-1316	A	CACNA1A	11/12	11/12	normal
2	AAD-1320	A	CACNA1A	13/14	13/14	normal
1	AAD-1323	A	CACNA1A	11/12	11/12	normal
3	AAD-1324	A	CACNA1A	7/11	7/11	normal
6	AAD-1325	A	CACNA1A	11/12	11/12	normal
1	AAD-1326	A	CACNA1A	11/13	11/13	normal
2	AAD-1326	A	CACNA1A	11/13	11/13	normal
5	AAD-1328	A	CACNA1A	11/13	11/13	normal
2	AAD-1329	A	CACNA1A	7/11	7/11	normal
10	AAD-1330	A	CACNA1A	11/12	11/12	normal
6	AAD-1332	A	CACNA1A	7/11	7/11	normal
3	AAD-1333	A	CACNA1A	11/11	11/11	normal
7	AAD-1335	A	CACNA1A	11/13	11/13	normal
2	AAD-1336	A	CACNA1A	7/7	8/8	normal
2	AAD-1340	A	CACNA1A	7/11	8/11	normal
7	AAD-1341	A	CACNA1A	12/12	12/12	normal

2	AAD-1342	A	CACNA1A	12/12	12/12	normal
5	AAD-1347	A	CACNA1A	11/12	11/12	normal
4	AAD-1349	A	CACNA1A	7/11	7/11	normal
3	AAD-1350	A	CACNA1A	7/12	7/12	normal
4	AAD-1351	A	CACNA1A	11/11	11/11	normal
3	AAD-1352	A	CACNA1A	11/14	11/14	normal
7	AAD-1352	A	CACNA1A	11/14	11/14	normal
1	AAD-1353	A	CACNA1A	13/13	13/13	normal
1	AAD-1354	A	CACNA1A	7/14	7/14	normal
3	AAD-1355	A	CACNA1A	11/14	11/14	normal
5	AAD-1356	A	CACNA1A	12/14	12/14	normal
7	AAD-1358	A	CACNA1A	11/12	11/12	normal
4	AAD-1359	A	CACNA1A	12/13	12/13	normal
5	AAD-1360	A	CACNA1A	11/11	11/11	normal
13	AAD-1362	A	CACNA1A	11/11	11/11	normal
4	AAD-1363	A	CACNA1A	11/13	11/13	normal
5	AAD-1364	A	CACNA1A	11/11	11/11	normal
1	AAD-1367	A	CACNA1A	11/13	11/13	normal
3	AAD-1371	A	CACNA1A	13/13	13/13	normal
1	AAD-1378	A	CACNA1A	7/11	7/11	normal
1	AAD-1379	A	CACNA1A	12/13	12/13	normal
1	AAD-1380	A	CACNA1A	13/13	13/13	normal
1	AAD-1383	A	CACNA1A	11/12	11/12	normal
1	AAD-1385	A	CACNA1A	12/13	12/13	normal
7	AAD-1386	A	CACNA1A	11/11	11/11	normal
8	AAD-1387	A	CACNA1A	11/13	11/13	normal
1	AAD-1398	A	CACNA1A	11/13	11/13	normal
3	AAD-1398	A	CACNA1A	12/13	12/13	normal
346	AAD-1398	A	CACNA1A	12/13	12/13	normal
1	AAD-1407	A	CACNA1A	8/12	8/12	normal
1	AAD-1410	A	CACNA1A	12/13	12/13	normal
9	AAD-386	A	CACNA1A	12/13	12/13	normal
7	AAD-481	A	CACNA1A	12/13	12/13	normal
10	AAD-481	A	CACNA1A	13/13	13/13	normal
3	AAD-723	A	CACNA1A	13/13	13/13	normal
13	AAD-723	A	CACNA1A	11/13	11/13	normal
7	AAD-726	A	CACNA1A	12/13	12/13	normal
10	AAD-729	A	CACNA1A	11/11	11/11	normal
5	AAD-736	A	CACNA1A	12/13	12/13	normal
3	AAD-928	A	CACNA1A	11/14	13/14	normal
20	AAD-928	A	CACNA1A	12/14	12/14	normal
8	AAD-935	A	CACNA1A	12/13	12/13	normal
1	AAD-952	A	CACNA1A	13/13	13/13	normal
1	AAD-958	A	CACNA1A	7/11	7/11	normal
7	AAD-960	A	CACNA1A	13/13	13/13	normal

20	AAD-960	A	CACNA1A	13/13	13/13	normal
1	AAD-961	A	CACNA1A	12/13	13/13	normal
2	AAD-961	A	CACNA1A	11/13	11/13	normal
1	AAD-963	A	CACNA1A	11/13	11/13	normal
1	AAD-966	A	CACNA1A	11/12	11/12	normal
6	AAD-967	A	CACNA1A	11/11	11/11	normal
8	AAD-967	A	CACNA1A	10/13	10/13	normal
1	AAD-968	A	CACNA1A	11/12	11/12	normal
1	AAD-972	A	CACNA1A	11/13	11/13	normal
2	AAD-972	A	CACNA1A	12/13	12/13	normal
4	AAD-973	A	CACNA1A	12/12	12/12	normal
1	AAD-976	A	CACNA1A	7/13	7/13	normal
2	AAD-976	A	CACNA1A	11/12	11/12	normal
1	AAD-978	A	CACNA1A	4/11	4/11	normal
6	AAD-979	A	CACNA1A	11/13	11/13	normal
5	AAD-997	A	CACNA1A	11/13	11/13	normal
6	AAD-997	A	CACNA1A	7/13	7/13	normal
8	AAD-997	A	CACNA1A	7/13	7/13	normal
1	AAD-999	A	CACNA1A	7/13	7/13	normal
7	AAR-319	A	CACNA1A	11/13	11/13	normal
1	AAR-549	A	CACNA1A	12/13	12/13	normal
3	AAR-875	A	CACNA1A	12/13	12/13	normal
3	AAR-880	A	CACNA1A	11/14	11/14	normal
5	AAR-886	A	CACNA1A	12/13	12/13	normal
3	AAR-887	A	CACNA1A	11/13	11/13	normal
1	AAR-895	A	CACNA1A	11/13	11/13	normal
24	FPD-1051	A	CACNA1A	12/13	12/13	normal
1	FSP-1177	A	CACNA1A	11/13	11/13	normal
5	FSP-1304	A	CACNA1A	11/11	11/11	normal
1	FSP-1305	A	CACNA1A	13/13	13/13	normal
2	FSP-1305	A	CACNA1A	11/13	11/13	normal
1	FSP-1307	A	CACNA1A	13/13	13/13	normal
7	FSP-1308	A	CACNA1A	7/13	7/13	normal
11	FSP-1308	A	CACNA1A	11/13	11/13	normal
3	FSP-403	A	CACNA1A	13/13	13/13	normal
25	SAL-025	A	CACNA1A	11/12	11/12	normal
1069	SAL-1069	A	CACNA1A	7/14	7/14	normal
167	SAL-167	A	CACNA1A	13/13	13/13	normal
4	SAL-307	A	CACNA1A	7/11	7/11	normal
5	SAL-307	A	CACNA1A	11/13	11/13	normal
7	SAL-307	A	CACNA1A	13/14	13/14	normal
780	SAL-780	A	CACNA1A	11/13	11/13	normal
904	SAL-904	A	CACNA1A	12/14	12/14	normal
995	SAL-995	A	CACNA1A	11/13	11/13	normal
13	AAD-1020	B	CACNA1A	11/13		normal

1	AAD-1045	B	CACNA1A	11/12		normal
1	AAD-1159	B	CACNA1A	12/13		normal
B0152	AAD-1213	B	CACNA1A	12/13		normal
B0153	AAD-1213	B	CACNA1A	12/13		normal
9	AAD-1249	B	CACNA1A	12/13		normal
1	AAD-1250	B	CACNA1A	11/11		normal
B0254	AAD-1261	B	CACNA1A	11/13		normal
1	AAD-1274	B	CACNA1A	12/12		normal
1	AAD-1389	B	CACNA1A	13/13		normal
10	AAD-139	B	CACNA1A	11/13		normal
B0006	AAD-1397	B	CACNA1A	11/13		normal
3	AAD-1399	B	CACNA1A	12/12		normal
2	AAD-1421	B	CACNA1A	12/13		normal
9	AAD-369	B	CACNA1A	11/11		normal
3	AAD-377	B	CACNA1A	11/11		normal
3	AAD-533	B	CACNA1A	11/13		normal
6	AAD-566	B	CACNA1A	11/11		normal
9	AAD-566	B	CACNA1A	11/12		normal
10	AAD-566	B	CACNA1A	11/11		normal
7	AAD-569	B	CACNA1A	12/13		normal
5	AAD-635	B	CACNA1A	12/13		normal
10	AAD-683	B	CACNA1A	7/11		normal
12	AAD-683	B	CACNA1A	11/11		normal
14	AAD-683	B	CACNA1A	7/13		normal
15	AAD-683	B	CACNA1A	7/13		normal
16	AAD-683	B	CACNA1A	11/12		normal
5	AAD-743	B	CACNA1A	11/13		normal
7	AAD-743	B	CACNA1A	11/13		normal
B0080	AAD-743	B	CACNA1A	11/11		normal
7	AAD-748	B	CACNA1A	13/13		normal
1	AAD-834	B	CACNA1A	11/13		normal
8	AAD-861	B	CACNA1A	12/12		normal
4	AAD-891	B	CACNA1A	11/11		normal
23	AAD-908	B	CACNA1A	13/13		normal
B0079	AAD-908	B	CACNA1A	11/13		normal
B0083	AAD-949	B	CACNA1A	7/13		normal
8	AAD-971	B	CACNA1A	11/22	11/22	pathogenic
3	AAR-242	B	CACNA1A	12/13		normal
5	AAR-500	B	CACNA1A	4/13		normal
16	AAR-512	B	CACNA1A	7/11		normal
1	AAR-676	B	CACNA1A	13/14		normal
1	AAR-740	B	CACNA1A	12/12		normal
B0149	AAR-860	B	CACNA1A	11/11		normal
B0229	AAR-895	B	CACNA1A	11/13		normal
10	AAR-912	B	CACNA1A	11/13		normal

B0194	AGE-028	B	CACNA1A	13/13		normal
B0039	B0039	B	CACNA1A	11/13		normal
B0040	B0040	B	CACNA1A	12/13		normal
B0047	B0047	B	CACNA1A	7/11		normal
B0071	B0071	B	CACNA1A	11/11		normal
B0126	B0126	B	CACNA1A	11/11		normal
B0146	B0146	B	CACNA1A	12/14		normal
B0164	B0164	B	CACNA1A	11/13		normal
B0168	B0168	B	CACNA1A	11/11		normal
B0171	B0171	B	CACNA1A	12/13		normal
B0198	B0198	B	CACNA1A	7/11		normal
B0199	B0199	B	CACNA1A	11/12		normal
B0215	B0215	B	CACNA1A	11/13		normal
B0244	B0244	B	CACNA1A	11/13		normal
B0247	B0247	B	CACNA1A	11/13		normal
B0250	B0250	B	CACNA1A	11/13		normal
B0253	B0253	B	CACNA1A	7/11		normal
B0278	B0278	B	CACNA1A	11/12		normal
1	CMT-234	B	CACNA1A	11/12		normal
4	CMT-234	B	CACNA1A	11/12		normal
16	CMT-234	B	CACNA1A	11/12		normal
1	DFT-315	B	CACNA1A	12/13		normal
9	DFT-326	B	CACNA1A	11/11		normal
18	ENE-013	B	CACNA1A	11/14		normal
9	FSP-006	B	CACNA1A	11/13		normal
11	FSP-006	B	CACNA1A	11/13		normal
13	FSP-006	B	CACNA1A	11/12		normal
14	FSP-006	B	CACNA1A	11/12		normal
20	FSP-056	B	CACNA1A	7/11		normal
21	FSP-056	B	CACNA1A	11/12		normal
1	FSP-078	B	CACNA1A	11/12		normal
13	FSP-088	B	CACNA1A	7/11		normal
1	FSP-1009	B	CACNA1A	11/11		normal
4	FSP-1044	B	CACNA1A	12/13		normal
1	FSP-1048	B	CACNA1A	12/14		normal
5	FSP-1057	B	CACNA1A	11/11		normal
7	FSP-1057	B	CACNA1A	11/11		normal
8	FSP-1059	B	CACNA1A	11/12		normal
1	FSP-1060	B	CACNA1A	11/13		normal
4	FSP-1062	B	CACNA1A	11/13		normal
1	FSP-1063	B	CACNA1A	7/13		normal
5	FSP-1064	B	CACNA1A	13/13		normal
6	FSP-1065	B	CACNA1A	12/13		normal
6	FSP-1066	B	CACNA1A	11/13		normal
3	FSP-1067	B	CACNA1A	12/18		normal

12	FSP-1070	B	CACNA1A	7/7		normal
3	FSP-1071	B	CACNA1A	7/13		normal
11	FSP-1072	B	CACNA1A	12/13		normal
1	FSP-1073	B	CACNA1A	11/12		normal
10	FSP-1073	B	CACNA1A	11/12		normal
1	FSP-1076	B	CACNA1A	7/11		normal
9	FSP-1081	B	CACNA1A	12/13		normal
3	FSP-1096	B	CACNA1A	4/7		normal
5	FSP-1098	B	CACNA1A	12/13		normal
4	FSP-1100	B	CACNA1A	4/12		normal
4	FSP-1101	B	CACNA1A	11/13		normal
1	FSP-1102	B	CACNA1A	11/11		normal
3	FSP-1105	B	CACNA1A	7/13		normal
3	FSP-1107	B	CACNA1A	11/13		normal
4	FSP-1109	B	CACNA1A	11/11		normal
7	FSP-1110	B	CACNA1A	11/14		normal
7	FSP-1111	B	CACNA1A	11/13		normal
3	FSP-1113	B	CACNA1A	12/13		normal
1	FSP-1117	B	CACNA1A	11/11		normal
4	FSP-1120	B	CACNA1A	12/14		normal
1	FSP-1124	B	CACNA1A	11/11		normal
2	FSP-1124	B	CACNA1A	11/11		normal
22	FSP-1130	B	CACNA1A	7/12		normal
15	FSP-1131	B	CACNA1A	11/13		normal
3	FSP-1136	B	CACNA1A	7/12		normal
1	FSP-1145	B	CACNA1A	11/13		normal
4	FSP-1147	B	CACNA1A	11/12		normal
3	FSP-1148	B	CACNA1A	10/11		normal
1	FSP-1149	B	CACNA1A	11/12		normal
1	FSP-1151	B	CACNA1A	11/13		normal
4	FSP-1152	B	CACNA1A	7/11		normal
5	FSP-1153	B	CACNA1A	11/13		normal
1	FSP-1155	B	CACNA1A	11/12		normal
1	FSP-1157	B	CACNA1A	12/13		normal
1	FSP-1164	B	CACNA1A	13/13		normal
1	FSP-1171	B	CACNA1A	12/13		normal
3	FSP-1172	B	CACNA1A	11/13		normal
3	FSP-1174	B	CACNA1A	11/13		normal
1	FSP-1176	B	CACNA1A	11/13		normal
3	FSP-1178	B	CACNA1A	11/13		normal
1	FSP-1179	B	CACNA1A	7/13		normal
7	FSP-1181	B	CACNA1A	12/13		normal
1	FSP-1182	B	CACNA1A	11/13		normal
1	FSP-1185	B	CACNA1A	11/11		normal
1	FSP-1186	B	CACNA1A	13/14		normal

1	FSP-1187	B	CACNA1A	11/11		normal
1	FSP-1188	B	CACNA1A	11/13		normal
1	FSP-1189	B	CACNA1A	13/13		normal
1	FSP-1191	B	CACNA1A	11/11		normal
1	FSP-1193	B	CACNA1A	13/13		normal
1	FSP-1194	B	CACNA1A	11/14		normal
1	FSP-1288	B	CACNA1A	13/13		normal
2	FSP-1308	B	CACNA1A	7/13		normal
3	FSP-1308	B	CACNA1A	11/11		normal
1	FSP-1359	B	CACNA1A	11/11		normal
1	FSP-1426	B	CACNA1A	11/13		normal
1	FSP-1433	B	CACNA1A	13/13		normal
2	FSP-1452	B	CACNA1A	10/11		normal
1	FSP-1455	B	CACNA1A	8/13		normal
1	FSP-1458	B	CACNA1A	12/13		normal
1	FSP-1459	B	CACNA1A	11/12		normal
1	FSP-1467	B	CACNA1A	11/11		normal
1	FSP-1470	B	CACNA1A	11/13		normal
1	FSP-1480	B	CACNA1A	11/13		normal
1	FSP-1482	B	CACNA1A	7/13		normal
1	FSP-1499	B	CACNA1A	11/13		normal
1	FSP-1500	B	CACNA1A	11/13		normal
1	FSP-1506	B	CACNA1A	11/12		normal
1	FSP-1507	B	CACNA1A	11/11		normal
2	FSP-1507	B	CACNA1A	11/13		normal
1	FSP-1509	B	CACNA1A	7/13		normal
1	FSP-1510	B	CACNA1A	13/13		normal
1	FSP-1515	B	CACNA1A	12/12		normal
1	FSP-1529	B	CACNA1A	11/12		normal
1	FSP-1531	B	CACNA1A	11/11		normal
1	FSP-1537	B	CACNA1A	7/11		normal
1	FSP-1540	B	CACNA1A	11/13		normal
1	FSP-1544	B	CACNA1A	11/12		normal
1	FSP-1546	B	CACNA1A	12/13		normal
B0110	FSP-1547	B	CACNA1A	13/13		normal
1	FSP-1548	B	CACNA1A	11/12		normal
1	FSP-1558	B	CACNA1A	13/13		normal
1	FSP-1560	B	CACNA1A	11/13		normal
4	FSP-1568	B	CACNA1A	11/11		normal
5	FSP-1568	B	CACNA1A	11/13		normal
2	FSP-1569	B	CACNA1A	7/13		normal
B0022	FSP-1570	B	CACNA1A	11/13		normal
3	FSP-1573	B	CACNA1A	7/12		normal
5	FSP-1576	B	CACNA1A	12/13		normal
1	FSP-1579	B	CACNA1A	7/7		normal

6	FSP-1582	B	CACNA1A	7/14		normal
8	FSP-1582	B	CACNA1A	7/11		normal
3	FSP-1584	B	CACNA1A	7/11		normal
10	FSP-1585	B	CACNA1A	12/13		normal
1	FSP-1586	B	CACNA1A	7/11		normal
2	FSP-1588	B	CACNA1A	7/11		normal
4	FSP-1592	B	CACNA1A	13/15		normal
1	FSP-1593	B	CACNA1A	11/13		normal
3	FSP-1593	B	CACNA1A	11/13		normal
13	FSP-1594	B	CACNA1A	13/13		normal
6	FSP-1595	B	CACNA1A	7/13		normal
7	FSP-1600	B	CACNA1A	7/11		normal
6	FSP-1634	B	CACNA1A	11/13		normal
2	FSP-1636	B	CACNA1A	11/13		normal
3	FSP-1638	B	CACNA1A	11/12		normal
B0037	FSP-258	B	CACNA1A	11/12		normal
10	FSP-405	B	CACNA1A	7/12		normal
11	FSP-455	B	CACNA1A	7/13		normal
B0241	FSP-491	B	CACNA1A	11/13		normal
B0182	FSP-820	B	CACNA1A	4/12		normal
18	FSP-929	B	CACNA1A	7/11		normal
6	FSP-985	B	CACNA1A	11/11		normal
4	ITD-539	B	CACNA1A	11/11		normal
10	ITD-868	B	CACNA1A	11/12		normal
B0068	ITD-868	B	CACNA1A	11/13		normal
B0109	PED-1526	B	CACNA1A	7/13		normal
1057	SAL-105	B	CACNA1A	12/13		normal
1053	SAL-1053	B	CACNA1A	11/11		normal
1070	SAL-107	B	CACNA1A	11/12		normal
1082	SAL-108	B	CACNA1A	11/13		normal
1083	SAL-1083	B	CACNA1A	12/13		normal
1085	SAL-1085	B	CACNA1A	11/14		normal
1086	SAL-1086	B	CACNA1A	7/11		normal
1088	SAL-1088	B	CACNA1A	11/13		normal
1089	SAL-1089	B	CACNA1A	11/11		normal
1098	SAL-109	B	CACNA1A	13/13		normal
1090	SAL-1090	B	CACNA1A	7/11		normal
1	SAL-1100	B	CACNA1A	11/13		normal
3	SAL-1100	B	CACNA1A	11/13		normal
1101	SAL-1101	B	CACNA1A	11/13		normal
113	SAL-113	B	CACNA1A	11/13		normal
B0233	SAL-113	B	CACNA1A	11/11		normal
4	SAL-1603	B	CACNA1A	13/14		normal
B0117	SAL-1606	B	CACNA1A	12/13		normal
2	SAL-2806	B	CACNA1A	11/13		normal

18	SAL-315	B	CACNA1A	7/11		normal
22	SAL-315	B	CACNA1A	11/11		normal
24	SAL-315	B	CACNA1A	11/11		normal
26	SAL-315	B	CACNA1A	7/11		normal
32	SAL-315	B	CACNA1A	11/13		normal
38	SAL-315	B	CACNA1A	11/13		normal
40	SAL-315	B	CACNA1A	11/13		normal
B0169	SAL-315	B	CACNA1A	11/13		normal
646	SAL-646	B	CACNA1A	12/13		normal
650	SAL-650	B	CACNA1A	11/13		normal
654	SAL-654	B	CACNA1A	11/12		normal
713	SAL-713	B	CACNA1A	13/14		normal
789	SAL-789	B	CACNA1A	11/13		normal
4	SAL-866	B	CACNA1A	11/13		normal
7	SAL-866	B	CACNA1A	11/11		normal
872	SAL-872	B	CACNA1A	11/13		normal
874	SAL-874	B	CACNA1A	7/11		normal
878	SAL-878	B	CACNA1A	11/14		normal
881	SAL-881	B	CACNA1A	11/12		normal
883	SAL-883	B	CACNA1A	11/13		normal
887	SAL-887	B	CACNA1A	11/13		normal
891	SAL-891	B	CACNA1A	7/13		normal
892	SAL-892	B	CACNA1A	11/12		normal
893	SAL-893	B	CACNA1A	11/13		normal
900	SAL-900	B	CACNA1A	13/13		normal
901	SAL-901	B	CACNA1A	12/13		normal
902	SAL-902	B	CACNA1A	11/11		normal
905	SAL-905	B	CACNA1A	11/13		normal
906	SAL-906	B	CACNA1A	13/13		normal
1	SAL-919	B	CACNA1A	12/13		normal
2	SAL-919	B	CACNA1A	13/13		normal
919	SAL-919	B	CACNA1A	12/13		normal
1	AAD-1004	A	HTT	17/27		normal
9	AAD-1007	A	HTT	17/23		normal
1	AAD-1008	A	HTT	17/19		normal
1	AAD-1011	A	HTT	17/22		normal
2	AAD-1011	A	HTT	17/18		normal
1	AAD-1012	A	HTT	13/16		normal
1	AAD-1014	A	HTT	18/19		normal
2	AAD-1014	A	HTT	19/20		normal
1	AAD-1015	A	HTT	12/17		normal
1	AAD-1017	A	HTT	17/17		normal
2	AAD-1017	A	HTT	17/17		normal
3	AAD-1017	A	HTT	17/20		normal
4	AAD-1017	A	HTT	17/20		normal

1	AAD-1019	A	HTT	19/20		normal
11	AAD-1020	A	HTT	20/27		normal
1	AAD-1021	A	HTT	18/31		normal
2	AAD-1021	A	HTT	15/31		normal
1	AAD-1023	A	HTT	17/18		normal
1	AAD-1024	A	HTT	9/18		normal
1	AAD-1031	A	HTT	15/19		normal
1	AAD-1032	A	HTT	19/19		normal
1	AAD-1035	A	HTT	17/17		normal
1	AAD-1036	A	HTT	17/18		normal
2	AAD-1036	A	HTT	15/18		normal
3	AAD-1036	A	HTT	18/18		normal
4	AAD-1036	A	HTT	17/18		normal
1	AAD-1038	A	HTT	18/37	18/37	pathogenic
1	AAD-1040	A	HTT	17/18		normal
1	AAD-1043	A	HTT	17/32		normal
1	AAD-1044	A	HTT	19/21		normal
1	AAD-1046	A	HTT	17/18		normal
1	AAD-1048	A	HTT	18/18		normal
1	AAD-1050	A	HTT	17/18		normal
3	AAD-1050	A	HTT	17/18		normal
4	AAD-1050	A	HTT	17/17		normal
1	AAD-1051	A	HTT	16/17		normal
2	AAD-1051	A	HTT	16/17		normal
1	AAD-1052	A	HTT	17/17		normal
1	AAD-1058	A	HTT	17/17		normal
1	AAD-1059	A	HTT	16/20		normal
1	AAD-1061	A	HTT	15/21		normal
1	AAD-1063	A	HTT	15/16		normal
2	AAD-1063	A	HTT	13/16		normal
1	AAD-1064	A	HTT	18/21		normal
2	AAD-1064	A	HTT	20/21		normal
1	AAD-1065	A	HTT	17/22		normal
2	AAD-1065	A	HTT	16/17		normal
3	AAD-1065	A	HTT	17/26		normal
1	AAD-1067	A	HTT	22/23		normal
1	AAD-1068	A	HTT	17/17		normal
1	AAD-1072	A	HTT	18/27		normal
1	AAD-1074	A	HTT	15/19		normal
1	AAD-1079	A	HTT	15/18		normal
1	AAD-1082	A	HTT	17/17		normal
1	AAD-1085	A	HTT	17/17		normal
1	AAD-1087	A	HTT	15/17		normal
1	AAD-1088	A	HTT	17/24		normal
1	AAD-1089	A	HTT	17/17		normal

1	AAD-1090	A	HTT	17/17		normal
1	AAD-1091	A	HTT	15/27		normal
1	AAD-1093	A	HTT	17/19		normal
1	AAD-1096	A	HTT	18/19		normal
1	AAD-1097	A	HTT	17/29		normal
1	AAD-1101	A	HTT	20/26		normal
1	AAD-1102	A	HTT	18/22		normal
1	AAD-1103	A	HTT	15/17		normal
1	AAD-1104	A	HTT	15/17		normal
1	AAD-1105	A	HTT	20/24		normal
1	AAD-1107	A	HTT	17/20		normal
1	AAD-1108	A	HTT	17/17		normal
1	AAD-1110	A	HTT	15/18		normal
1	AAD-1111	A	HTT	15/30		normal
1	AAD-1112	A	HTT	17/17		normal
2	AAD-1112	A	HTT	18/25		normal
1	AAD-1114	A	HTT	15/18		normal
1	AAD-1115	A	HTT	17/22		normal
1	AAD-1119	A	HTT	9/18		normal
1	AAD-1121	A	HTT	17/21		normal
2	AAD-1121	A	HTT	20/21		normal
1	AAD-1123	A	HTT	18/19		normal
1	AAD-1124	A	HTT	17/20		normal
1	AAD-1125	A	HTT	24/28		normal
1	AAD-1127	A	HTT	17/17		normal
1	AAD-1130	A	HTT	17/20		normal
1	AAD-1131	A	HTT	18/26		normal
1	AAD-1133	A	HTT	12/22		normal
1	AAD-1148	A	HTT	17/20		normal
2	AAD-1148	A	HTT	17/22		normal
4	AAD-1148	A	HTT	16/17		normal
1	AAD-1150	A	HTT	17/19		normal
1	AAD-1154	A	HTT	15/21		normal
1	AAD-1155	A	HTT	19/20		normal
1	AAD-1156	A	HTT	18/21		normal
1	AAD-1158	A	HTT	16/17		normal
1	AAD-1160	A	HTT	17/17		normal
1	AAD-1161	A	HTT	15/17		normal
1	AAD-1163	A	HTT	20/21		normal
1	AAD-1164	A	HTT	18/23		normal
1	AAD-1165	A	HTT	16/19		normal
1	AAD-1171	A	HTT	17/19		normal
1	AAD-1172	A	HTT	16/17		normal
1	AAD-1173	A	HTT	19/32		normal
1	AAD-1175	A	HTT	15/17		normal

1	AAD-1176	A	HTT	15/22		normal
1	AAD-1178	A	HTT	18/21		normal
1	AAD-1179	A	HTT	15/20		normal
2	AAD-1179	A	HTT	19/20		normal
1	AAD-1181	A	HTT	15/17		normal
1	AAD-1184	A	HTT	19/22		normal
1	AAD-1185	A	HTT	17/19		normal
1	AAD-1190	A	HTT	17/20		normal
1	AAD-1191	A	HTT	18/19		normal
1	AAD-1192	A	HTT	17/17		normal
1	AAD-1194	A	HTT	17/19		normal
1	AAD-1195	A	HTT	17/19		normal
1	AAD-1198	A	HTT	18/21		normal
1	AAD-1201	A	HTT	9/15		normal
1	AAD-1205	A	HTT	18/22		normal
1	AAD-1206	A	HTT	20/25		normal
1	AAD-1220	A	HTT	10/17		normal
1	AAD-1221	A	HTT	15/19		normal
3	AAD-1247	A	HTT	17/25		normal
10	AAD-1251	A	HTT	17/19		normal
3	AAD-1267	A	HTT	18/30		normal
2	AAD-1269	A	HTT	16/23		normal
4	AAD-1269	A	HTT	15/23		normal
5	AAD-1271	A	HTT	17/18		normal
13	AAD-1280	A	HTT	17/17		normal
4	AAD-1285	A	HTT	16/17		normal
3	AAD-1288	A	HTT	17/19		normal
2	AAD-1291	A	HTT	23/25		normal
3	AAD-1294	A	HTT	18/19		normal
3	AAD-1296	A	HTT	16/17		normal
3	AAD-1299	A	HTT	17/34		normal
2	AAD-1300	A	HTT	17/29		normal
8	AAD-1302	A	HTT	18/24		normal
1	AAD-1303	A	HTT	13/19		normal
1	AAD-1304	A	HTT	20/22		normal
2	AAD-1304	A	HTT	16/19		normal
5	AAD-1306	A	HTT	19/22		normal
5	AAD-1309	A	HTT	17/20		normal
6	AAD-1310	A	HTT	17/18		normal
4	AAD-1316	A	HTT	17/23		normal
2	AAD-1320	A	HTT	17/20		normal
1	AAD-1323	A	HTT	17/18		normal
3	AAD-1324	A	HTT	17/17		normal
6	AAD-1325	A	HTT	17/20		normal
1	AAD-1326	A	HTT	17/17		normal

2	AAD-1326	A	HTT	16/19		normal
5	AAD-1328	A	HTT	20/24		normal
2	AAD-1329	A	HTT	17/18		normal
10	AAD-1330	A	HTT	16/17		normal
6	AAD-1332	A	HTT	17/17		normal
3	AAD-1333	A	HTT	17/24		normal
7	AAD-1335	A	HTT	17/20		normal
2	AAD-1336	A	HTT	17/17		normal
2	AAD-1340	A	HTT	16/17		normal
7	AAD-1341	A	HTT	17/19		normal
2	AAD-1342	A	HTT	16/17		normal
5	AAD-1347	A	HTT	16/17		normal
4	AAD-1349	A	HTT	17/18		normal
3	AAD-1350	A	HTT	17/18		normal
4	AAD-1351	A	HTT	16/21		normal
3	AAD-1352	A	HTT	18/19		normal
7	AAD-1352	A	HTT	17/20		normal
1	AAD-1353	A	HTT	19/21		normal
1	AAD-1354	A	HTT	14/21		normal
3	AAD-1355	A	HTT	17/21		normal
5	AAD-1356	A	HTT	20/22		normal
7	AAD-1358	A	HTT	17/17		normal
4	AAD-1359	A	HTT	18/19		normal
5	AAD-1360	A	HTT	15/17		normal
13	AAD-1362	A	HTT	17/31		normal
4	AAD-1363	A	HTT	17/23		normal
5	AAD-1364	A	HTT	20/22		normal
1	AAD-1367	A	HTT	18/19		normal
3	AAD-1371	A	HTT	17/25		normal
1	AAD-1378	A	HTT	18/22		normal
1	AAD-1379	A	HTT	17/19		normal
1	AAD-1380	A	HTT	17/18		normal
1	AAD-1383	A	HTT	15/24		normal
1	AAD-1385	A	HTT	17/17		normal
7	AAD-1386	A	HTT	18/25		normal
8	AAD-1387	A	HTT	16/17		normal
1	AAD-1398	A	HTT	18/22		normal
3	AAD-1398	A	HTT	18/22		normal
346	AAD-1398	A	HTT	18/22		normal
1	AAD-1407	A	HTT	17/18		normal
1	AAD-1410	A	HTT	17/20		normal
9	AAD-386	A	HTT	17/19		normal
7	AAD-481	A	HTT	17/18		normal
10	AAD-481	A	HTT	17/18		normal
3	AAD-723	A	HTT	15/15		normal

13	AAD-723	A	HTT	15/17		normal
7	AAD-726	A	HTT	17/17		normal
10	AAD-729	A	HTT	17/26		normal
5	AAD-736	A	HTT	19/24		normal
3	AAD-928	A	HTT	20/20		normal
20	AAD-928	A	HTT	17/20		normal
8	AAD-935	A	HTT	16/21		normal
1	AAD-952	A	HTT	15/19		normal
1	AAD-958	A	HTT	15/18		normal
7	AAD-960	A	HTT	16/18		normal
20	AAD-960	A	HTT	14/24		normal
1	AAD-961	A	HTT	18/19		normal
2	AAD-961	A	HTT	18/19		normal
1	AAD-963	A	HTT	24/28		normal
1	AAD-966	A	HTT	17/18		normal
6	AAD-967	A	HTT	15/17		normal
8	AAD-967	A	HTT	15/17		normal
1	AAD-968	A	HTT	20/27		normal
1	AAD-972	A	HTT	17/23		normal
2	AAD-972	A	HTT	16/22		normal
4	AAD-973	A	HTT	19/22		normal
1	AAD-976	A	HTT	18/18		normal
2	AAD-976	A	HTT	15/18		normal
1	AAD-978	A	HTT	15/24		normal
6	AAD-979	A	HTT	17/20		normal
5	AAD-997	A	HTT	17/17		normal
6	AAD-997	A	HTT	17/18		normal
8	AAD-997	A	HTT	17/18		normal
1	AAD-999	A	HTT	18/19		normal
7	AAR-319	A	HTT	15/15		normal
1	AAR-549	A	HTT	18/21		normal
3	AAR-875	A	HTT	12/17		normal
3	AAR-880	A	HTT	17/18		normal
5	AAR-886	A	HTT	18/23		normal
3	AAR-887	A	HTT	17/18		normal
1	AAR-895	A	HTT	18/18		normal
24	FPD-1051	A	HTT	17/20		normal
1	FSP-1177	A	HTT	17/18		normal
5	FSP-1304	A	HTT	17/23		normal
1	FSP-1305	A	HTT	17/19		normal
2	FSP-1305	A	HTT	15/19		normal
1	FSP-1307	A	HTT	16/17		normal
7	FSP-1308	A	HTT	17/18		normal
11	FSP-1308	A	HTT	15/17		normal
3	FSP-403	A	HTT	17/18		normal

25	SAL-025	A	HTT	18/23		normal
1069	SAL-1069	A	HTT	17/17		normal
167	SAL-167	A	HTT	15/17		normal
4	SAL-307	A	HTT	15/17		normal
5	SAL-307	A	HTT	17/17		normal
7	SAL-307	A	HTT	15/17		normal
780	SAL-780	A	HTT	15/18		normal
904	SAL-904	A	HTT	17/17		normal
995	SAL-995	A	HTT	17/19		normal
13	AAD-1020	B	HTT	18/23		normal
1	AAD-1045	B	HTT	19/21		normal
1	AAD-1159	B	HTT	16/17		normal
B0152	AAD-1213	B	HTT	17/17		normal
B0153	AAD-1213	B	HTT	15/16		normal
9	AAD-1249	B	HTT	17/20		normal
1	AAD-1250	B	HTT	15/18		normal
B0254	AAD-1261	B	HTT	17/19		normal
1	AAD-1274	B	HTT	20/25		normal
1	AAD-1389	B	HTT	15/20		normal
10	AAD-139	B	HTT	18/22		normal
B0006	AAD-1397	B	HTT	17/18		normal
3	AAD-1399	B	HTT	22/23		normal
2	AAD-1421	B	HTT	17/19		normal
9	AAD-369	B	HTT	18/25		normal
3	AAD-377	B	HTT	18/25		normal
3	AAD-533	B	HTT	15/26		normal
6	AAD-566	B	HTT	19/20		normal
9	AAD-566	B	HTT	17/20		normal
10	AAD-566	B	HTT	19/20		normal
7	AAD-569	B	HTT	15/18		normal
5	AAD-635	B	HTT	15/17		normal
10	AAD-683	B	HTT	17/18		normal
12	AAD-683	B	HTT	17/18		normal
14	AAD-683	B	HTT	18/23		normal
15	AAD-683	B	HTT	18/23		normal
16	AAD-683	B	HTT	14/17		normal
5	AAD-743	B	HTT	20/32		normal
7	AAD-743	B	HTT	15/17		normal
B0080	AAD-743	B	HTT	17/20		normal
7	AAD-748	B	HTT	19/19		normal
1	AAD-834	B	HTT	9/17		normal
8	AAD-861	B	HTT	17/20		normal
4	AAD-891	B	HTT	17/19		normal
23	AAD-908	B	HTT	17/28		normal
B0079	AAD-908	B	HTT	22/23		normal

B0083	AAD-949	B	HTT	19/24		normal
8	AAD-971	B	HTT	17/19		normal
3	AAR-242	B	HTT	17/22		normal
5	AAR-500	B	HTT	16/17		normal
16	AAR-512	B	HTT	17/19		normal
1	AAR-676	B	HTT	18/24		normal
1	AAR-740	B	HTT	10/15		normal
B0149	AAR-860	B	HTT	17/19		normal
B0229	AAR-895	B	HTT	18/18		normal
10	AAR-912	B	HTT	17/17		normal
B0194	AGE-028	B	HTT	18/19		normal
B0039	B0039	B	HTT	17/20		normal
B0040	B0040	B	HTT	10/17		normal
B0047	B0047	B	HTT	16/17		normal
B0071	B0071	B	HTT	14/17		normal
B0126	B0126	B	HTT	15/17		normal
B0146	B0146	B	HTT	17/17		normal
B0164	B0164	B	HTT	15/18		normal
B0168	B0168	B	HTT	16/18		normal
B0171	B0171	B	HTT	18/26		normal
B0198	B0198	B	HTT	19/20		normal
B0199	B0199	B	HTT	19/20		normal
B0215	B0215	B	HTT	17/23		normal
B0244	B0244	B	HTT	17/17		normal
B0247	B0247	B	HTT	18/22		normal
B0250	B0250	B	HTT	15/17		normal
B0253	B0253	B	HTT	17/27		normal
B0278	B0278	B	HTT	17/24		normal
1	CMT-234	B	HTT	17/18		normal
4	CMT-234	B	HTT	16/17		normal
16	CMT-234	B	HTT	17/17		normal
1	DFT-315	B	HTT	18/19		normal
9	DFT-326	B	HTT	14/21		normal
18	ENE-013	B	HTT	15/17		normal
9	FSP-006	B	HTT	17/26		normal
11	FSP-006	B	HTT	16/17		normal
13	FSP-006	B	HTT	18/19		normal
14	FSP-006	B	HTT	18/19		normal
20	FSP-056	B	HTT	17/18		normal
21	FSP-056	B	HTT	18/19		normal
1	FSP-078	B	HTT	15/20		normal
13	FSP-088	B	HTT	15/17		normal
1	FSP-1009	B	HTT	15/17		normal
4	FSP-1044	B	HTT	16/17		normal
1	FSP-1048	B	HTT	12/15		normal

5	FSP-1057	B	HTT	17/18		normal
7	FSP-1057	B	HTT	17/18		normal
8	FSP-1059	B	HTT	15/18		normal
1	FSP-1060	B	HTT	17/18		normal
4	FSP-1062	B	HTT	16/17		normal
1	FSP-1063	B	HTT	17/25		normal
5	FSP-1064	B	HTT	17/29		normal
6	FSP-1065	B	HTT	18/20		normal
6	FSP-1066	B	HTT	15/17		normal
3	FSP-1067	B	HTT	19/25		normal
12	FSP-1070	B	HTT	10/17		normal
3	FSP-1071	B	HTT	17/18		normal
11	FSP-1072	B	HTT	21/23		normal
1	FSP-1073	B	HTT	16/18		normal
10	FSP-1073	B	HTT	16/17		normal
1	FSP-1076	B	HTT	17/18		normal
9	FSP-1081	B	HTT	17/18		normal
3	FSP-1096	B	HTT	18/19		normal
5	FSP-1098	B	HTT	28/33		normal
4	FSP-1100	B	HTT	16/17		normal
4	FSP-1101	B	HTT	17/19		normal
1	FSP-1102	B	HTT	18/20		normal
3	FSP-1105	B	HTT	17/18		normal
3	FSP-1107	B	HTT	17/18		normal
4	FSP-1109	B	HTT	19/21		normal
7	FSP-1110	B	HTT	16/18		normal
7	FSP-1111	B	HTT	17/24		normal
3	FSP-1113	B	HTT	17/18		normal
1	FSP-1117	B	HTT	17/19		normal
4	FSP-1120	B	HTT	17/20		normal
1	FSP-1124	B	HTT	16/17		normal
2	FSP-1124	B	HTT	17/17		normal
22	FSP-1130	B	HTT	17/20		normal
15	FSP-1131	B	HTT	17/20		normal
3	FSP-1136	B	HTT	15/15		normal
1	FSP-1145	B	HTT	18/20		normal
4	FSP-1147	B	HTT	14/18		normal
3	FSP-1148	B	HTT	15/17		normal
1	FSP-1149	B	HTT	17/21		normal
1	FSP-1151	B	HTT	16/17		normal
4	FSP-1152	B	HTT	17/22		normal
5	FSP-1153	B	HTT	16/17		normal
1	FSP-1155	B	HTT	19/19		normal
1	FSP-1157	B	HTT	18/23		normal
1	FSP-1164	B	HTT	17/26		normal

1	FSP-1171	B	HTT	17/18		normal
3	FSP-1172	B	HTT	17/18		normal
3	FSP-1174	B	HTT	17/22		normal
1	FSP-1176	B	HTT	15/19		normal
3	FSP-1178	B	HTT	17/25		normal
1	FSP-1179	B	HTT	18/19		normal
7	FSP-1181	B	HTT	19/21		normal
1	FSP-1182	B	HTT	17/19		normal
1	FSP-1185	B	HTT	16/17		normal
1	FSP-1186	B	HTT	17/24		normal
1	FSP-1187	B	HTT	17/19		normal
1	FSP-1188	B	HTT	16/23		normal
1	FSP-1189	B	HTT	17/17		normal
1	FSP-1191	B	HTT	21/22		normal
1	FSP-1193	B	HTT	22/28		normal
1	FSP-1194	B	HTT	17/17		normal
1	FSP-1288	B	HTT	12/17		normal
2	FSP-1308	B	HTT	17/19		normal
3	FSP-1308	B	HTT	15/18		normal
1	FSP-1359	B	HTT	16/17		normal
1	FSP-1426	B	HTT	9/27		normal
1	FSP-1433	B	HTT	16/17		normal
2	FSP-1452	B	HTT	18/21		normal
1	FSP-1455	B	HTT	16/17		normal
1	FSP-1458	B	HTT	18/19		normal
1	FSP-1459	B	HTT	22/23		normal
1	FSP-1467	B	HTT	17/25		normal
1	FSP-1470	B	HTT	15/17		normal
1	FSP-1480	B	HTT	19/19		normal
1	FSP-1482	B	HTT	15/20		normal
1	FSP-1499	B	HTT	17/18		normal
1	FSP-1500	B	HTT	19/26		normal
1	FSP-1506	B	HTT	19/27		normal
1	FSP-1507	B	HTT	21/24		normal
2	FSP-1507	B	HTT	19/21		normal
1	FSP-1509	B	HTT	17/17		normal
1	FSP-1510	B	HTT	19/27		normal
1	FSP-1515	B	HTT	17/18		normal
1	FSP-1529	B	HTT	18/19		normal
1	FSP-1531	B	HTT	17/19		normal
1	FSP-1537	B	HTT	12/14		normal
1	FSP-1540	B	HTT	17/23		normal
1	FSP-1544	B	HTT	15/23		normal
1	FSP-1546	B	HTT	17/21		normal
B0110	FSP-1547	B	HTT	19/25		normal

1	FSP-1548	B	HTT	18/20		normal
1	FSP-1558	B	HTT	20/23		normal
1	FSP-1560	B	HTT	17/18		normal
4	FSP-1568	B	HTT	19/32		normal
5	FSP-1568	B	HTT	18/32		normal
2	FSP-1569	B	HTT	17/22		normal
B0022	FSP-1570	B	HTT	12/17		normal
3	FSP-1573	B	HTT	17/17		normal
5	FSP-1576	B	HTT	18/21		normal
1	FSP-1579	B	HTT	17/21		normal
6	FSP-1582	B	HTT	14/18		normal
8	FSP-1582	B	HTT	14/18		normal
3	FSP-1584	B	HTT	18/36	19/38	pathogenic
10	FSP-1585	B	HTT	15/18		normal
1	FSP-1586	B	HTT	17/19		normal
2	FSP-1588	B	HTT	17/24		normal
4	FSP-1592	B	HTT	17/31		normal
1	FSP-1593	B	HTT	17/20		normal
3	FSP-1593	B	HTT	17/31		normal
13	FSP-1594	B	HTT	15/17		normal
6	FSP-1595	B	HTT	15/17		normal
7	FSP-1600	B	HTT	19/26		normal
6	FSP-1634	B	HTT	17/17		normal
2	FSP-1636	B	HTT	15/21		normal
3	FSP-1638	B	HTT	15/17		normal
B0037	FSP-258	B	HTT	17/19		normal
10	FSP-405	B	HTT	15/17		normal
11	FSP-455	B	HTT	17/18		normal
B0241	FSP-491	B	HTT	15/18		normal
B0182	FSP-820	B	HTT	15/21		normal
18	FSP-929	B	HTT	15/17		normal
6	FSP-985	B	HTT	20/30		normal
4	ITD-539	B	HTT	10/17		normal
10	ITD-868	B	HTT	17/17		normal
B0068	ITD-868	B	HTT	17/17		normal
B0109	PED-1526	B	HTT	12/19		normal
1057	SAL-105	B	HTT	15/15		normal
1053	SAL-1053	B	HTT	17/18		normal
1070	SAL-107	B	HTT	17/24		normal
1082	SAL-108	B	HTT	15/19		normal
1083	SAL-1083	B	HTT	17/26		normal
1085	SAL-1085	B	HTT	10/19		normal
1086	SAL-1086	B	HTT	15/23		normal
1088	SAL-1088	B	HTT	17/22		normal
1089	SAL-1089	B	HTT	15/18		normal

1098	SAL-109	B	HTT	15/17		normal
1090	SAL-1090	B	HTT	17/20		normal
1	SAL-1100	B	HTT	16/22		normal
3	SAL-1100	B	HTT	16/22		normal
1101	SAL-1101	B	HTT	20/23		normal
113	SAL-113	B	HTT	15/20		normal
B0233	SAL-113	B	HTT	19/20		normal
4	SAL-1603	B	HTT	17/18		normal
B0117	SAL-1606	B	HTT	17/24		normal
2	SAL-2806	B	HTT	17/18		normal
18	SAL-315	B	HTT	16/20		normal
22	SAL-315	B	HTT	16/27		normal
24	SAL-315	B	HTT	16/27		normal
26	SAL-315	B	HTT	16/20		normal
32	SAL-315	B	HTT	20/21		normal
38	SAL-315	B	HTT	16/17		normal
40	SAL-315	B	HTT	17/21		normal
B0169	SAL-315	B	HTT	16/17		normal
646	SAL-646	B	HTT	17/19		normal
650	SAL-650	B	HTT	22/23		normal
654	SAL-654	B	HTT	15/18		normal
713	SAL-713	B	HTT	17/23		normal
789	SAL-789	B	HTT	21/23		normal
4	SAL-866	B	HTT	15/17		normal
7	SAL-866	B	HTT	17/21		normal
872	SAL-872	B	HTT	16/17		normal
874	SAL-874	B	HTT	17/18		normal
878	SAL-878	B	HTT	17/19		normal
881	SAL-881	B	HTT	17/19		normal
883	SAL-883	B	HTT	16/17		normal
887	SAL-887	B	HTT	19/20		normal
891	SAL-891	B	HTT	16/17		normal
892	SAL-892	B	HTT	17/17		normal
893	SAL-893	B	HTT	20/24		normal
900	SAL-900	B	HTT	17/17		normal
901	SAL-901	B	HTT	15/17		normal
902	SAL-902	B	HTT	15/17		normal
905	SAL-905	B	HTT	18/20		normal
906	SAL-906	B	HTT	17/20		normal
1	SAL-919	B	HTT	16/17		normal
2	SAL-919	B	HTT	17/17		normal
919	SAL-919	B	HTT	17/19		normal
1	AAD-1004	A	NOP56	4/7		normal
9	AAD-1007	A	NOP56	4/7		normal
1	AAD-1008	A	NOP56	5/7		normal

1	AAD-1011	A	<i>NOP56</i>	4/7		normal
2	AAD-1011	A	<i>NOP56</i>	7/7		normal
1	AAD-1012	A	<i>NOP56</i>	5/6		normal
1	AAD-1014	A	<i>NOP56</i>	4/4		normal
2	AAD-1014	A	<i>NOP56</i>	4/4		normal
1	AAD-1015	A	<i>NOP56</i>	4/7		normal
1	AAD-1017	A	<i>NOP56</i>	4/4		normal
2	AAD-1017	A	<i>NOP56</i>	4/9		normal
3	AAD-1017	A	<i>NOP56</i>	4/7		normal
4	AAD-1017	A	<i>NOP56</i>	4/9		normal
1	AAD-1019	A	<i>NOP56</i>	4/4		normal
11	AAD-1020	A	<i>NOP56</i>	7/8		normal
1	AAD-1021	A	<i>NOP56</i>	4/9		normal
2	AAD-1021	A	<i>NOP56</i>	7/9		normal
1	AAD-1023	A	<i>NOP56</i>	4/7		normal
1	AAD-1024	A	<i>NOP56</i>	7/9		normal
1	AAD-1031	A	<i>NOP56</i>	4/7		normal
1	AAD-1032	A	<i>NOP56</i>	4/7		normal
1	AAD-1035	A	<i>NOP56</i>	7/8		normal
1	AAD-1036	A	<i>NOP56</i>	4/7		normal
2	AAD-1036	A	<i>NOP56</i>	4/7		normal
3	AAD-1036	A	<i>NOP56</i>	4/7		normal
4	AAD-1036	A	<i>NOP56</i>	4/7		normal
1	AAD-1038	A	<i>NOP56</i>	9/9		normal
1	AAD-1040	A	<i>NOP56</i>	7/10		normal
1	AAD-1043	A	<i>NOP56</i>	7/9		normal
1	AAD-1044	A	<i>NOP56</i>	4/7		normal
1	AAD-1046	A	<i>NOP56</i>	7/9		normal
1	AAD-1048	A	<i>NOP56</i>	6/8		normal
1	AAD-1050	A	<i>NOP56</i>	7/8		normal
3	AAD-1050	A	<i>NOP56</i>	4/7		normal
4	AAD-1050	A	<i>NOP56</i>	4/7		normal
1	AAD-1051	A	<i>NOP56</i>	4/9		normal
2	AAD-1051	A	<i>NOP56</i>	7/9		normal
1	AAD-1052	A	<i>NOP56</i>	4/7		normal
1	AAD-1058	A	<i>NOP56</i>	4/7		normal
1	AAD-1059	A	<i>NOP56</i>	7/9		normal
1	AAD-1061	A	<i>NOP56</i>	4/7		normal
1	AAD-1063	A	<i>NOP56</i>	4/7		normal
2	AAD-1063	A	<i>NOP56</i>	4/4		normal
1	AAD-1064	A	<i>NOP56</i>	9/9		normal
2	AAD-1064	A	<i>NOP56</i>	7/9		normal
1	AAD-1065	A	<i>NOP56</i>	4/7		normal
2	AAD-1065	A	<i>NOP56</i>	4/7		normal
3	AAD-1065	A	<i>NOP56</i>	4/7		normal

1	AAD-1067	A	<i>NOP56</i>	4/9		normal
1	AAD-1068	A	<i>NOP56</i>	7/9		normal
1	AAD-1072	A	<i>NOP56</i>	4/6		normal
1	AAD-1074	A	<i>NOP56</i>	7/9		normal
1	AAD-1079	A	<i>NOP56</i>	7/7		normal
1	AAD-1082	A	<i>NOP56</i>	7/7		normal
1	AAD-1085	A	<i>NOP56</i>	4/4		normal
1	AAD-1087	A	<i>NOP56</i>	4/9		normal
1	AAD-1088	A	<i>NOP56</i>	4/7		normal
1	AAD-1089	A	<i>NOP56</i>	4/4		normal
1	AAD-1090	A	<i>NOP56</i>	7/7		normal
1	AAD-1091	A	<i>NOP56</i>	4/8		normal
1	AAD-1093	A	<i>NOP56</i>	4/7		normal
1	AAD-1096	A	<i>NOP56</i>	7/7		normal
1	AAD-1097	A	<i>NOP56</i>	7/10		normal
1	AAD-1101	A	<i>NOP56</i>	4/7		normal
1	AAD-1102	A	<i>NOP56</i>	4/7		normal
1	AAD-1103	A	<i>NOP56</i>	6/13		normal
1	AAD-1104	A	<i>NOP56</i>	4/7		normal
1	AAD-1105	A	<i>NOP56</i>	4/7		normal
1	AAD-1107	A	<i>NOP56</i>	4/7		normal
1	AAD-1108	A	<i>NOP56</i>	4/4		normal
1	AAD-1110	A	<i>NOP56</i>	4/4		normal
1	AAD-1111	A	<i>NOP56</i>	4/7		normal
1	AAD-1112	A	<i>NOP56</i>	4/11		normal
2	AAD-1112	A	<i>NOP56</i>	4/5		normal
1	AAD-1114	A	<i>NOP56</i>	4/7		normal
1	AAD-1115	A	<i>NOP56</i>	4/7		normal
1	AAD-1119	A	<i>NOP56</i>	4/7		normal
1	AAD-1121	A	<i>NOP56</i>	4/5		normal
2	AAD-1121	A	<i>NOP56</i>	5/7		normal
1	AAD-1123	A	<i>NOP56</i>	7/7		normal
1	AAD-1124	A	<i>NOP56</i>	7/7		normal
1	AAD-1125	A	<i>NOP56</i>	4/4		normal
1	AAD-1127	A	<i>NOP56</i>	7/7		normal
1	AAD-1130	A	<i>NOP56</i>	4/4		normal
1	AAD-1131	A	<i>NOP56</i>	4/4		normal
1	AAD-1133	A	<i>NOP56</i>	4/7		normal
1	AAD-1148	A	<i>NOP56</i>	4/4		normal
2	AAD-1148	A	<i>NOP56</i>	4/7		normal
4	AAD-1148	A	<i>NOP56</i>	7/7		normal
1	AAD-1150	A	<i>NOP56</i>	/		normal
1	AAD-1154	A	<i>NOP56</i>	4/9		normal
1	AAD-1155	A	<i>NOP56</i>	7/11		normal
1	AAD-1156	A	<i>NOP56</i>	4/7		normal

1	AAD-1158	A	<i>NOP56</i>	7/7		normal
1	AAD-1160	A	<i>NOP56</i>	7/7		normal
1	AAD-1161	A	<i>NOP56</i>	7/9		normal
1	AAD-1163	A	<i>NOP56</i>	4/4		normal
1	AAD-1164	A	<i>NOP56</i>	7/7		normal
1	AAD-1165	A	<i>NOP56</i>	4/7		normal
1	AAD-1171	A	<i>NOP56</i>	4/4		normal
1	AAD-1172	A	<i>NOP56</i>	7/29		pathogenic
1	AAD-1173	A	<i>NOP56</i>	4/7		normal
1	AAD-1175	A	<i>NOP56</i>	4/9		normal
1	AAD-1176	A	<i>NOP56</i>	5/6		normal
1	AAD-1178	A	<i>NOP56</i>	4/8		normal
1	AAD-1179	A	<i>NOP56</i>	4/4		normal
2	AAD-1179	A	<i>NOP56</i>	7/9		normal
1	AAD-1181	A	<i>NOP56</i>	4/7		normal
1	AAD-1184	A	<i>NOP56</i>	4/10		normal
1	AAD-1185	A	<i>NOP56</i>	7/7		normal
1	AAD-1190	A	<i>NOP56</i>	4/7		normal
1	AAD-1191	A	<i>NOP56</i>	4/7		normal
1	AAD-1192	A	<i>NOP56</i>	7/9		normal
1	AAD-1194	A	<i>NOP56</i>	4/29		pathogenic
1	AAD-1195	A	<i>NOP56</i>	7/7		normal
1	AAD-1198	A	<i>NOP56</i>	7/7		normal
1	AAD-1201	A	<i>NOP56</i>	4/4		normal
1	AAD-1205	A	<i>NOP56</i>	4/7		normal
1	AAD-1206	A	<i>NOP56</i>	7/9		normal
1	AAD-1220	A	<i>NOP56</i>	4/7		normal
1	AAD-1221	A	<i>NOP56</i>	7/8		normal
3	AAD-1247	A	<i>NOP56</i>	7/7		normal
10	AAD-1251	A	<i>NOP56</i>	4/4		normal
3	AAD-1267	A	<i>NOP56</i>	6/7		normal
2	AAD-1269	A	<i>NOP56</i>	4/7		normal
4	AAD-1269	A	<i>NOP56</i>	7/7		normal
5	AAD-1271	A	<i>NOP56</i>	4/7		normal
13	AAD-1280	A	<i>NOP56</i>	7/8		normal
4	AAD-1285	A	<i>NOP56</i>	4/7		normal
3	AAD-1288	A	<i>NOP56</i>	7/9		normal
2	AAD-1291	A	<i>NOP56</i>	4/7		normal
3	AAD-1294	A	<i>NOP56</i>	7/9		normal
3	AAD-1296	A	<i>NOP56</i>	4/7		normal
3	AAD-1299	A	<i>NOP56</i>	4/7		normal
2	AAD-1300	A	<i>NOP56</i>	4/7		normal
8	AAD-1302	A	<i>NOP56</i>	7/10		normal
1	AAD-1303	A	<i>NOP56</i>	4/7		normal
1	AAD-1304	A	<i>NOP56</i>	4/7		normal

2	AAD-1304	A	<i>NOP56</i>	4/7		normal
5	AAD-1306	A	<i>NOP56</i>	4/7		normal
5	AAD-1309	A	<i>NOP56</i>	4/4		normal
6	AAD-1310	A	<i>NOP56</i>	7/7		normal
4	AAD-1316	A	<i>NOP56</i>	7/7		normal
2	AAD-1320	A	<i>NOP56</i>	4/4		normal
1	AAD-1323	A	<i>NOP56</i>	4/7		normal
3	AAD-1324	A	<i>NOP56</i>	6/7		normal
6	AAD-1325	A	<i>NOP56</i>	4/4		normal
1	AAD-1326	A	<i>NOP56</i>	4/8		normal
2	AAD-1326	A	<i>NOP56</i>	4/4		normal
5	AAD-1328	A	<i>NOP56</i>	4/7		normal
2	AAD-1329	A	<i>NOP56</i>	4/4		normal
10	AAD-1330	A	<i>NOP56</i>	7/9		normal
6	AAD-1332	A	<i>NOP56</i>	7/7		normal
3	AAD-1333	A	<i>NOP56</i>	4/7		normal
7	AAD-1335	A	<i>NOP56</i>	4/7		normal
2	AAD-1336	A	<i>NOP56</i>	4/7		normal
2	AAD-1340	A	<i>NOP56</i>	4/4		normal
7	AAD-1341	A	<i>NOP56</i>	4/9		normal
2	AAD-1342	A	<i>NOP56</i>	7/11		normal
5	AAD-1347	A	<i>NOP56</i>	4/4		normal
4	AAD-1349	A	<i>NOP56</i>	7/7		normal
3	AAD-1350	A	<i>NOP56</i>	7/9		normal
4	AAD-1351	A	<i>NOP56</i>	6/8		normal
3	AAD-1352	A	<i>NOP56</i>	4/7		normal
7	AAD-1352	A	<i>NOP56</i>	4/7		normal
1	AAD-1353	A	<i>NOP56</i>	4/9		normal
1	AAD-1354	A	<i>NOP56</i>	7/7		normal
3	AAD-1355	A	<i>NOP56</i>	4/7		normal
5	AAD-1356	A	<i>NOP56</i>	4/4		normal
7	AAD-1358	A	<i>NOP56</i>	4/4		normal
4	AAD-1359	A	<i>NOP56</i>	4/7		normal
5	AAD-1360	A	<i>NOP56</i>	4/7		normal
13	AAD-1362	A	<i>NOP56</i>	7/7		normal
4	AAD-1363	A	<i>NOP56</i>	4/7		normal
5	AAD-1364	A	<i>NOP56</i>	7/7		normal
1	AAD-1367	A	<i>NOP56</i>	7/7		normal
3	AAD-1371	A	<i>NOP56</i>	4/7		normal
1	AAD-1378	A	<i>NOP56</i>	4/5		normal
1	AAD-1379	A	<i>NOP56</i>	4/5		normal
1	AAD-1380	A	<i>NOP56</i>	4/7		normal
1	AAD-1383	A	<i>NOP56</i>	4/7		normal
1	AAD-1385	A	<i>NOP56</i>	4/7		normal
7	AAD-1386	A	<i>NOP56</i>	4/9		normal

8	AAD-1387	A	<i>NOP56</i>	7/8		normal
1	AAD-1398	A	<i>NOP56</i>	4/7		normal
3	AAD-1398	A	<i>NOP56</i>	4/4		normal
346	AAD-1398	A	<i>NOP56</i>	4/7		normal
1	AAD-1407	A	<i>NOP56</i>	4/7		normal
1	AAD-1410	A	<i>NOP56</i>	4/7		normal
9	AAD-386	A	<i>NOP56</i>	4/7		normal
7	AAD-481	A	<i>NOP56</i>	4/7		normal
10	AAD-481	A	<i>NOP56</i>	4/7		normal
3	AAD-723	A	<i>NOP56</i>	4/9		normal
13	AAD-723	A	<i>NOP56</i>	7/9		normal
7	AAD-726	A	<i>NOP56</i>	4/4		normal
10	AAD-729	A	<i>NOP56</i>	4/9		normal
5	AAD-736	A	<i>NOP56</i>	4/7		normal
3	AAD-928	A	<i>NOP56</i>	4/7		normal
20	AAD-928	A	<i>NOP56</i>	4/4		normal
8	AAD-935	A	<i>NOP56</i>	7/7		normal
1	AAD-952	A	<i>NOP56</i>	4/4		normal
1	AAD-958	A	<i>NOP56</i>	7/7		normal
7	AAD-960	A	<i>NOP56</i>	4/7		normal
20	AAD-960	A	<i>NOP56</i>	4/4		normal
1	AAD-961	A	<i>NOP56</i>	4/5		normal
2	AAD-961	A	<i>NOP56</i>	4/5		normal
1	AAD-963	A	<i>NOP56</i>	4/7		normal
1	AAD-966	A	<i>NOP56</i>	7/10		normal
6	AAD-967	A	<i>NOP56</i>	7/7		normal
8	AAD-967	A	<i>NOP56</i>	7/8		normal
1	AAD-968	A	<i>NOP56</i>	7/7		normal
1	AAD-972	A	<i>NOP56</i>	4/4		normal
2	AAD-972	A	<i>NOP56</i>	4/4		normal
4	AAD-973	A	<i>NOP56</i>	4/9		normal
1	AAD-976	A	<i>NOP56</i>	4/4		normal
2	AAD-976	A	<i>NOP56</i>	4/7		normal
1	AAD-978	A	<i>NOP56</i>	7/7		normal
6	AAD-979	A	<i>NOP56</i>	7/11		normal
5	AAD-997	A	<i>NOP56</i>	7/7		normal
6	AAD-997	A	<i>NOP56</i>	4/7		normal
8	AAD-997	A	<i>NOP56</i>	4/7		normal
1	AAD-999	A	<i>NOP56</i>	7/7		normal
7	AAR-319	A	<i>NOP56</i>	4/11		normal
1	AAR-549	A	<i>NOP56</i>	7/7		normal
3	AAR-875	A	<i>NOP56</i>	4/7		normal
3	AAR-880	A	<i>NOP56</i>	7/9		normal
5	AAR-886	A	<i>NOP56</i>	4/7		normal
3	AAR-887	A	<i>NOP56</i>	4/7		normal

1	AAR-895	A	<i>NOP56</i>	4/7		normal
24	FPD-1051	A	<i>NOP56</i>	4/7		normal
1	FSP-1177	A	<i>NOP56</i>	7/9		normal
5	FSP-1304	A	<i>NOP56</i>	4/7		normal
1	FSP-1305	A	<i>NOP56</i>	7/9		normal
2	FSP-1305	A	<i>NOP56</i>	7/9		normal
1	FSP-1307	A	<i>NOP56</i>	4/9		normal
7	FSP-1308	A	<i>NOP56</i>	7/7		normal
11	FSP-1308	A	<i>NOP56</i>	7/7		normal
3	FSP-403	A	<i>NOP56</i>	4/7		normal
25	SAL-025	A	<i>NOP56</i>	7/9		normal
1069	SAL-1069	A	<i>NOP56</i>	4/4		normal
167	SAL-167	A	<i>NOP56</i>	4/6		normal
4	SAL-307	A	<i>NOP56</i>	4/9		normal
5	SAL-307	A	<i>NOP56</i>	4/4		normal
7	SAL-307	A	<i>NOP56</i>	4/7		normal
780	SAL-780	A	<i>NOP56</i>	4/7		normal
904	SAL-904	A	<i>NOP56</i>	4/4		normal
995	SAL-995	A	<i>NOP56</i>	4/9		normal
13	AAD-1020	B	<i>NOP56</i>	4/7		normal
1	AAD-1045	B	<i>NOP56</i>	9/11		normal
1	AAD-1159	B	<i>NOP56</i>	4/8		normal
B0152	AAD-1213	B	<i>NOP56</i>	4/4		normal
B0153	AAD-1213	B	<i>NOP56</i>	4/4		normal
9	AAD-1249	B	<i>NOP56</i>	7/7		normal
1	AAD-1250	B	<i>NOP56</i>	4/7		normal
B0254	AAD-1261	B	<i>NOP56</i>	7/9		normal
1	AAD-1274	B	<i>NOP56</i>	3/5		normal
1	AAD-1389	B	<i>NOP56</i>	4/7		normal
10	AAD-139	B	<i>NOP56</i>	4/4		normal
B0006	AAD-1397	B	<i>NOP56</i>	7/7		normal
3	AAD-1399	B	<i>NOP56</i>	4/7		normal
2	AAD-1421	B	<i>NOP56</i>	4/4		normal
9	AAD-369	B	<i>NOP56</i>	7/9		normal
3	AAD-377	B	<i>NOP56</i>	4/4		normal
3	AAD-533	B	<i>NOP56</i>	4/4		normal
6	AAD-566	B	<i>NOP56</i>	4/7		normal
9	AAD-566	B	<i>NOP56</i>	7/7		normal
10	AAD-566	B	<i>NOP56</i>	7/7		normal
7	AAD-569	B	<i>NOP56</i>	7/7		normal
5	AAD-635	B	<i>NOP56</i>	4/4		normal
10	AAD-683	B	<i>NOP56</i>	4/9		normal
12	AAD-683	B	<i>NOP56</i>	4/4		normal
14	AAD-683	B	<i>NOP56</i>	4/7		normal
15	AAD-683	B	<i>NOP56</i>	7/9		normal

16	AAD-683	B	<i>NOP56</i>	4/7		normal
5	AAD-743	B	<i>NOP56</i>	7/9		normal
7	AAD-743	B	<i>NOP56</i>	7/9		normal
B0080	AAD-743	B	<i>NOP56</i>	7/9		normal
7	AAD-748	B	<i>NOP56</i>	7/7		normal
1	AAD-834	B	<i>NOP56</i>	4/7		normal
8	AAD-861	B	<i>NOP56</i>	4/7		normal
4	AAD-891	B	<i>NOP56</i>	4/8		normal
23	AAD-908	B	<i>NOP56</i>	4/7		normal
B0079	AAD-908	B	<i>NOP56</i>	4/9		normal
B0083	AAD-949	B	<i>NOP56</i>	7/9		normal
8	AAD-971	B	<i>NOP56</i>	4/9		normal
3	AAR-242	B	<i>NOP56</i>	7/7		normal
5	AAR-500	B	<i>NOP56</i>	7/7		normal
16	AAR-512	B	<i>NOP56</i>	4/7		normal
1	AAR-676	B	<i>NOP56</i>	4/4		normal
1	AAR-740	B	<i>NOP56</i>	4/4		normal
B0149	AAR-860	B	<i>NOP56</i>	6/7		normal
B0229	AAR-895	B	<i>NOP56</i>	4/7		normal
10	AAR-912	B	<i>NOP56</i>	7/7		normal
B0194	AGE-028	B	<i>NOP56</i>	5/7		normal
B0039	B0039	B	<i>NOP56</i>	4/4		normal
B0040	B0040	B	<i>NOP56</i>	4/7		normal
B0047	B0047	B	<i>NOP56</i>	4/4		normal
B0071	B0071	B	<i>NOP56</i>	4/7		normal
B0126	B0126	B	<i>NOP56</i>	4/7		normal
B0146	B0146	B	<i>NOP56</i>	4/7		normal
B0164	B0164	B	<i>NOP56</i>	9/11		normal
B0168	B0168	B	<i>NOP56</i>	4/9		normal
B0171	B0171	B	<i>NOP56</i>	4/7		normal
B0198	B0198	B	<i>NOP56</i>	7/7		normal
B0199	B0199	B	<i>NOP56</i>	4/9		normal
B0215	B0215	B	<i>NOP56</i>	4/7		normal
B0244	B0244	B	<i>NOP56</i>	4/7		normal
B0247	B0247	B	<i>NOP56</i>	4/7		normal
B0250	B0250	B	<i>NOP56</i>	7/30		pathogenic
B0253	B0253	B	<i>NOP56</i>	3/7		normal
B0278	B0278	B	<i>NOP56</i>	4/7		normal
1	CMT-234	B	<i>NOP56</i>	7/9		normal
4	CMT-234	B	<i>NOP56</i>	7/7		normal
16	CMT-234	B	<i>NOP56</i>	7/7		normal
1	DFT-315	B	<i>NOP56</i>	7/9		normal
9	DFT-326	B	<i>NOP56</i>	7/7		normal
18	ENE-013	B	<i>NOP56</i>	7/9		normal
9	FSP-006	B	<i>NOP56</i>	4/7		normal

11	FSP-006	B	<i>NOP56</i>	4/7		normal
13	FSP-006	B	<i>NOP56</i>	4/7		normal
14	FSP-006	B	<i>NOP56</i>	4/4		normal
20	FSP-056	B	<i>NOP56</i>	7/9		normal
21	FSP-056	B	<i>NOP56</i>	7/9		normal
1	FSP-078	B	<i>NOP56</i>	4/4		normal
13	FSP-088	B	<i>NOP56</i>	4/7		normal
1	FSP-1009	B	<i>NOP56</i>	4/4		normal
4	FSP-1044	B	<i>NOP56</i>	4/9		normal
1	FSP-1048	B	<i>NOP56</i>	7/7		normal
5	FSP-1057	B	<i>NOP56</i>	4/7		normal
7	FSP-1057	B	<i>NOP56</i>	4/7		normal
8	FSP-1059	B	<i>NOP56</i>	4/4		normal
1	FSP-1060	B	<i>NOP56</i>	4/9		normal
4	FSP-1062	B	<i>NOP56</i>	4/9		normal
1	FSP-1063	B	<i>NOP56</i>	4/7		normal
5	FSP-1064	B	<i>NOP56</i>	7/7		normal
6	FSP-1065	B	<i>NOP56</i>	7/7		normal
6	FSP-1066	B	<i>NOP56</i>	7/8		normal
3	FSP-1067	B	<i>NOP56</i>	5/9		normal
12	FSP-1070	B	<i>NOP56</i>	7/7		normal
3	FSP-1071	B	<i>NOP56</i>	4/7		normal
11	FSP-1072	B	<i>NOP56</i>	7/9		normal
1	FSP-1073	B	<i>NOP56</i>	4/7		normal
10	FSP-1073	B	<i>NOP56</i>	4/4		normal
1	FSP-1076	B	<i>NOP56</i>	7/7		normal
9	FSP-1081	B	<i>NOP56</i>	4/7		normal
3	FSP-1096	B	<i>NOP56</i>	3/8		normal
5	FSP-1098	B	<i>NOP56</i>	4/7		normal
4	FSP-1100	B	<i>NOP56</i>	4/7		normal
4	FSP-1101	B	<i>NOP56</i>	4/4		normal
1	FSP-1102	B	<i>NOP56</i>	5/7		normal
3	FSP-1105	B	<i>NOP56</i>	7/7		normal
3	FSP-1107	B	<i>NOP56</i>	4/7		normal
4	FSP-1109	B	<i>NOP56</i>	7/7		normal
7	FSP-1110	B	<i>NOP56</i>	4/4		normal
7	FSP-1111	B	<i>NOP56</i>	7/9		normal
3	FSP-1113	B	<i>NOP56</i>	4/7		normal
1	FSP-1117	B	<i>NOP56</i>	7/8		normal
4	FSP-1120	B	<i>NOP56</i>	7/7		normal
1	FSP-1124	B	<i>NOP56</i>	4/7		normal
2	FSP-1124	B	<i>NOP56</i>	4/7		normal
22	FSP-1130	B	<i>NOP56</i>	7/9		normal
15	FSP-1131	B	<i>NOP56</i>	7/7		normal
3	FSP-1136	B	<i>NOP56</i>	4/4		normal

1	FSP-1145	B	<i>NOP56</i>	4/7		normal
4	FSP-1147	B	<i>NOP56</i>	4/7		normal
3	FSP-1148	B	<i>NOP56</i>	6/10		normal
1	FSP-1149	B	<i>NOP56</i>	5/7		normal
1	FSP-1151	B	<i>NOP56</i>	4/7		normal
4	FSP-1152	B	<i>NOP56</i>	4/4		normal
5	FSP-1153	B	<i>NOP56</i>	4/7		normal
1	FSP-1155	B	<i>NOP56</i>	4/7		normal
1	FSP-1157	B	<i>NOP56</i>	4/7		normal
1	FSP-1164	B	<i>NOP56</i>	7/8		normal
1	FSP-1171	B	<i>NOP56</i>	4/4		normal
3	FSP-1172	B	<i>NOP56</i>	4/7		normal
3	FSP-1174	B	<i>NOP56</i>	7/9		normal
1	FSP-1176	B	<i>NOP56</i>	4/9		normal
3	FSP-1178	B	<i>NOP56</i>	7/9		normal
1	FSP-1179	B	<i>NOP56</i>	4/4		normal
7	FSP-1181	B	<i>NOP56</i>	7/7		normal
1	FSP-1182	B	<i>NOP56</i>	4/4		normal
1	FSP-1185	B	<i>NOP56</i>	7/9		normal
1	FSP-1186	B	<i>NOP56</i>	6/9		normal
1	FSP-1187	B	<i>NOP56</i>	4/7		normal
1	FSP-1188	B	<i>NOP56</i>	4/4		normal
1	FSP-1189	B	<i>NOP56</i>	4/9		normal
1	FSP-1191	B	<i>NOP56</i>	4/9		normal
1	FSP-1193	B	<i>NOP56</i>	7/7		normal
1	FSP-1194	B	<i>NOP56</i>	4/7		normal
1	FSP-1288	B	<i>NOP56</i>	4/4		normal
2	FSP-1308	B	<i>NOP56</i>	4/7		normal
3	FSP-1308	B	<i>NOP56</i>	7/8		normal
1	FSP-1359	B	<i>NOP56</i>	4/7		normal
1	FSP-1426	B	<i>NOP56</i>	4/9		normal
1	FSP-1433	B	<i>NOP56</i>	4/4		normal
2	FSP-1452	B	<i>NOP56</i>	6/7		normal
1	FSP-1455	B	<i>NOP56</i>	4/7		normal
1	FSP-1458	B	<i>NOP56</i>	7/7		normal
1	FSP-1459	B	<i>NOP56</i>	4/4		normal
1	FSP-1467	B	<i>NOP56</i>	4/7		normal
1	FSP-1470	B	<i>NOP56</i>	6/7		normal
1	FSP-1480	B	<i>NOP56</i>	4/9		normal
1	FSP-1482	B	<i>NOP56</i>	4/7		normal
1	FSP-1499	B	<i>NOP56</i>	4/7		normal
1	FSP-1500	B	<i>NOP56</i>	7/9		normal
1	FSP-1506	B	<i>NOP56</i>	7/7		normal
1	FSP-1507	B	<i>NOP56</i>	5/7		normal
2	FSP-1507	B	<i>NOP56</i>	7/7		normal

1	FSP-1509	B	<i>NOP56</i>	4/7		normal
1	FSP-1510	B	<i>NOP56</i>	5/7		normal
1	FSP-1515	B	<i>NOP56</i>	7/7		normal
1	FSP-1529	B	<i>NOP56</i>	7/9		normal
1	FSP-1531	B	<i>NOP56</i>	4/7		normal
1	FSP-1537	B	<i>NOP56</i>	7/7		normal
1	FSP-1540	B	<i>NOP56</i>	4/7		normal
1	FSP-1544	B	<i>NOP56</i>	4/7		normal
1	FSP-1546	B	<i>NOP56</i>	4/7		normal
B0110	FSP-1547	B	<i>NOP56</i>	4/4		normal
1	FSP-1548	B	<i>NOP56</i>	4/7		normal
1	FSP-1558	B	<i>NOP56</i>	7/7		normal
1	FSP-1560	B	<i>NOP56</i>	7/12		normal
4	FSP-1568	B	<i>NOP56</i>	4/7		normal
5	FSP-1568	B	<i>NOP56</i>	4/7		normal
2	FSP-1569	B	<i>NOP56</i>	4/7		normal
B0022	FSP-1570	B	<i>NOP56</i>	7/7		normal
3	FSP-1573	B	<i>NOP56</i>	4/7		normal
5	FSP-1576	B	<i>NOP56</i>	4/7		normal
1	FSP-1579	B	<i>NOP56</i>	7/7		normal
6	FSP-1582	B	<i>NOP56</i>	6/9		normal
8	FSP-1582	B	<i>NOP56</i>	4/7		normal
3	FSP-1584	B	<i>NOP56</i>	4/7		normal
10	FSP-1585	B	<i>NOP56</i>	4/4		normal
1	FSP-1586	B	<i>NOP56</i>	4/4		normal
2	FSP-1588	B	<i>NOP56</i>	4/7		normal
4	FSP-1592	B	<i>NOP56</i>	4/7		normal
1	FSP-1593	B	<i>NOP56</i>	7/9		normal
3	FSP-1593	B	<i>NOP56</i>	7/7		normal
13	FSP-1594	B	<i>NOP56</i>	4/9		normal
6	FSP-1595	B	<i>NOP56</i>	4/4		normal
7	FSP-1600	B	<i>NOP56</i>	7/9		normal
6	FSP-1634	B	<i>NOP56</i>	5/7		normal
2	FSP-1636	B	<i>NOP56</i>	7/7		normal
3	FSP-1638	B	<i>NOP56</i>	4/4		normal
B0037	FSP-258	B	<i>NOP56</i>	4/4		normal
10	FSP-405	B	<i>NOP56</i>	4/9		normal
11	FSP-455	B	<i>NOP56</i>	7/7		normal
B0241	FSP-491	B	<i>NOP56</i>	7/7		normal
B0182	FSP-820	B	<i>NOP56</i>	4/4		normal
18	FSP-929	B	<i>NOP56</i>	7/7		normal
6	FSP-985	B	<i>NOP56</i>	4/7		normal
4	ITD-539	B	<i>NOP56</i>	4/4		normal
10	ITD-868	B	<i>NOP56</i>	4/8		normal
B0068	ITD-868	B	<i>NOP56</i>	4/8		normal

B0109	PED-1526	B	<i>NOP56</i>	4/7		normal
1057	SAL-105	B	<i>NOP56</i>	4/7		normal
1053	SAL-1053	B	<i>NOP56</i>	4/4		normal
1070	SAL-107	B	<i>NOP56</i>	4/4		normal
1082	SAL-108	B	<i>NOP56</i>	7/7		normal
1083	SAL-1083	B	<i>NOP56</i>	4/7		normal
1085	SAL-1085	B	<i>NOP56</i>	7/7		normal
1086	SAL-1086	B	<i>NOP56</i>	7/7		normal
1088	SAL-1088	B	<i>NOP56</i>	4/7		normal
1089	SAL-1089	B	<i>NOP56</i>	7/7		normal
1098	SAL-109	B	<i>NOP56</i>	7/7		normal
1090	SAL-1090	B	<i>NOP56</i>	4/7		normal
1	SAL-1100	B	<i>NOP56</i>	7/9		normal
3	SAL-1100	B	<i>NOP56</i>	7/9		normal
1101	SAL-1101	B	<i>NOP56</i>	7/9		normal
113	SAL-113	B	<i>NOP56</i>	4/4		normal
B0233	SAL-113	B	<i>NOP56</i>	4/7		normal
4	SAL-1603	B	<i>NOP56</i>	4/7		normal
B0117	SAL-1606	B	<i>NOP56</i>	7/7		normal
2	SAL-2806	B	<i>NOP56</i>	7/7		normal
18	SAL-315	B	<i>NOP56</i>	4/7		normal
22	SAL-315	B	<i>NOP56</i>	4/7		normal
24	SAL-315	B	<i>NOP56</i>	4/6		normal
26	SAL-315	B	<i>NOP56</i>	4/7		normal
32	SAL-315	B	<i>NOP56</i>	4/7		normal
38	SAL-315	B	<i>NOP56</i>	4/7		normal
40	SAL-315	B	<i>NOP56</i>	4/4		normal
B0169	SAL-315	B	<i>NOP56</i>	4/4		normal
646	SAL-646	B	<i>NOP56</i>	4/9		normal
650	SAL-650	B	<i>NOP56</i>	7/8		normal
654	SAL-654	B	<i>NOP56</i>	4/9		normal
713	SAL-713	B	<i>NOP56</i>	4/7		normal
789	SAL-789	B	<i>NOP56</i>	4/4		normal
4	SAL-866	B	<i>NOP56</i>	4/7		normal
7	SAL-866	B	<i>NOP56</i>	4/8		normal
872	SAL-872	B	<i>NOP56</i>	7/7		normal
874	SAL-874	B	<i>NOP56</i>	4/4		normal
878	SAL-878	B	<i>NOP56</i>	4/7		normal
881	SAL-881	B	<i>NOP56</i>	4/7		normal
883	SAL-883	B	<i>NOP56</i>	7/7		normal
887	SAL-887	B	<i>NOP56</i>	4/7		normal
891	SAL-891	B	<i>NOP56</i>	6/7		normal
892	SAL-892	B	<i>NOP56</i>	4/4		normal
893	SAL-893	B	<i>NOP56</i>	7/7		normal
900	SAL-900	B	<i>NOP56</i>	4/7		normal

901	SAL-901	B	<i>NOP56</i>	7/7		normal
902	SAL-902	B	<i>NOP56</i>	4/7		normal
905	SAL-905	B	<i>NOP56</i>	4/5		normal
906	SAL-906	B	<i>NOP56</i>	4/7		normal
1	SAL-919	B	<i>NOP56</i>	7/7		normal
2	SAL-919	B	<i>NOP56</i>	4/7		normal
919	SAL-919	B	<i>NOP56</i>	4/7		normal
1	AAD-1004	A	<i>TBP</i>	35/36	37/37	normal
9	AAD-1007	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1008	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1011	A	<i>TBP</i>	30/37	31/38	normal
2	AAD-1011	A	<i>TBP</i>	30/37	31/38	normal
1	AAD-1012	A	<i>TBP</i>	32/34	33/35	normal
1	AAD-1014	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-1014	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1015	A	<i>TBP</i>	34/36	35/37	normal
1	AAD-1017	A	<i>TBP</i>	35/38	36/39	normal
2	AAD-1017	A	<i>TBP</i>	35/36	36/37	normal
3	AAD-1017	A	<i>TBP</i>	36/38	37/39	normal
4	AAD-1017	A	<i>TBP</i>	36/38	37/39	normal
1	AAD-1019	A	<i>TBP</i>	35/35	36/36	normal
11	AAD-1020	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1021	A	<i>TBP</i>	34/35	35/36	normal
2	AAD-1021	A	<i>TBP</i>	34/37	35/38	normal
1	AAD-1023	A	<i>TBP</i>	35/38	36/39	normal
1	AAD-1024	A	<i>TBP</i>	38/39	39/40	normal
1	AAD-1031	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1032	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1035	A	<i>TBP</i>	37/37	38/38	normal
1	AAD-1036	A	<i>TBP</i>	34/35	36/36	normal
2	AAD-1036	A	<i>TBP</i>	34/35	36/36	normal
3	AAD-1036	A	<i>TBP</i>	35/38	36/39	normal
4	AAD-1036	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1038	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1040	A	<i>TBP</i>	36/39	37/40	normal
1	AAD-1043	A	<i>TBP</i>	35/35	36/36	normal
1	AAD-1044	A	<i>TBP</i>	35/38	36/39	normal
1	AAD-1046	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1048	A	<i>TBP</i>	37/39	38/40	normal
1	AAD-1050	A	<i>TBP</i>	34/35	35/36	normal
3	AAD-1050	A	<i>TBP</i>	31/35	32/36	normal
4	AAD-1050	A	<i>TBP</i>	31/35	32/36	normal
1	AAD-1051	A	<i>TBP</i>	35/36	36/37	normal
2	AAD-1051	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1052	A	<i>TBP</i>	34/38	35/39	normal

1	AAD-1058	A	<i>TBP</i>	33/37	34/38	normal
1	AAD-1059	A	<i>TBP</i>	37/38	38/39	normal
1	AAD-1061	A	<i>TBP</i>	36/36	37/37	normal
1	AAD-1063	A	<i>TBP</i>	34/35	35/36	normal
2	AAD-1063	A	<i>TBP</i>	34/36	35/37	normal
1	AAD-1064	A	<i>TBP</i>	35/38	36/39	normal
2	AAD-1064	A	<i>TBP</i>	34/35	36/36	normal
1	AAD-1065	A	<i>TBP</i>	29/38	30/39	normal
2	AAD-1065	A	<i>TBP</i>	29/37	30/38	normal
3	AAD-1065	A	<i>TBP</i>	37/38	38/39	normal
1	AAD-1067	A	<i>TBP</i>	35/36	37/37	normal
1	AAD-1068	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1072	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1074	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1079	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1082	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1085	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1087	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-1088	A	<i>TBP</i>	28/36	29/37	normal
1	AAD-1089	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1090	A	<i>TBP</i>	28/34	29/35	normal
1	AAD-1091	A	<i>TBP</i>	36/45	37/46	normal
1	AAD-1093	A	<i>TBP</i>	37/39	38/40	normal
1	AAD-1096	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1097	A	<i>TBP</i>	37/37	38/38	normal
1	AAD-1101	A	<i>TBP</i>	31/36	32/37	normal
1	AAD-1102	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1103	A	<i>TBP</i>	37/38	38/39	normal
1	AAD-1104	A	<i>TBP</i>	31/34	32/35	normal
1	AAD-1105	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1107	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1108	A	<i>TBP</i>	36/36	37/37	normal
1	AAD-1110	A	<i>TBP</i>	36/38	37/39	normal
1	AAD-1111	A	<i>TBP</i>	34/36	35/37	normal
1	AAD-1112	A	<i>TBP</i>	37/39	38/40	normal
2	AAD-1112	A	<i>TBP</i>	37/39	38/40	normal
1	AAD-1114	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1115	A	<i>TBP</i>	37/39	38/40	normal
1	AAD-1119	A	<i>TBP</i>	37/40	38/41	normal
1	AAD-1121	A	<i>TBP</i>	36/37	38/38	normal
2	AAD-1121	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1123	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1124	A	<i>TBP</i>	36/36	37/37	normal
1	AAD-1125	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1127	A	<i>TBP</i>	28/40	29/41	normal

1	AAD-1130	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1131	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-1133	A	<i>TBP</i>	34/38	35/39	normal
1	AAD-1148	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-1148	A	<i>TBP</i>	35/37	36/38	normal
4	AAD-1148	A	<i>TBP</i>	37/38	38/39	normal
1	AAD-1150	A	<i>TBP</i>	34/35	36/36	normal
1	AAD-1154	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1155	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1156	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1158	A	<i>TBP</i>	35/36	37/37	normal
1	AAD-1160	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1161	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-1163	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1164	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1165	A	<i>TBP</i>	33/34	35/35	normal
1	AAD-1171	A	<i>TBP</i>	35/41	36/42	normal
1	AAD-1172	A	<i>TBP</i>	35/38	36/39	normal
1	AAD-1173	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1175	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1176	A	<i>TBP</i>	33/36	34/37	normal
1	AAD-1178	A	<i>TBP</i>	37/39	38/40	normal
1	AAD-1179	A	<i>TBP</i>	36/37	37/38	normal
2	AAD-1179	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1181	A	<i>TBP</i>	35/39	36/40	normal
1	AAD-1184	A	<i>TBP</i>	35/36	37/37	normal
1	AAD-1185	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1190	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1191	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-1192	A	<i>TBP</i>	30/34	31/35	normal
1	AAD-1194	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1195	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-1198	A	<i>TBP</i>	33/34	35/35	normal
1	AAD-1201	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1205	A	<i>TBP</i>	34/36	35/37	normal
1	AAD-1206	A	<i>TBP</i>	37/37	38/38	normal
1	AAD-1220	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-1221	A	<i>TBP</i>	37/37	38/38	normal
3	AAD-1247	A	<i>TBP</i>	36/37	37/38	normal
10	AAD-1251	A	<i>TBP</i>	35/38	36/39	normal
3	AAD-1267	A	<i>TBP</i>	36/37	38/39	normal
2	AAD-1269	A	<i>TBP</i>	36/37	37/38	normal
4	AAD-1269	A	<i>TBP</i>	36/37	37/38	normal
5	AAD-1271	A	<i>TBP</i>	34/36	35/37	normal
13	AAD-1280	A	<i>TBP</i>	36/37	37/38	normal

4	AAD-1285	A	<i>TBP</i>	30/37	31/38	normal
3	AAD-1288	A	<i>TBP</i>	36/37	37/38	normal
2	AAD-1291	A	<i>TBP</i>	35/38	36/39	normal
3	AAD-1294	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-1296	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-1299	A	<i>TBP</i>	35/36	36/37	normal
2	AAD-1300	A	<i>TBP</i>	35/37	36/38	normal
8	AAD-1302	A	<i>TBP</i>	34/35	36/36	normal
1	AAD-1303	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1304	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-1304	A	<i>TBP</i>	35/37	36/38	normal
5	AAD-1306	A	<i>TBP</i>	35/37	36/38	normal
5	AAD-1309	A	<i>TBP</i>	34/35	36/36	normal
6	AAD-1310	A	<i>TBP</i>	37/37	38/38	normal
4	AAD-1316	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-1320	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-1323	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-1324	A	<i>TBP</i>	36/36	37/37	normal
6	AAD-1325	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1326	A	<i>TBP</i>	36/37	35/38	normal
2	AAD-1326	A	<i>TBP</i>	36/37	38/38	normal
5	AAD-1328	A	<i>TBP</i>	36/37	38/38	normal
2	AAD-1329	A	<i>TBP</i>	34/37	35/38	normal
10	AAD-1330	A	<i>TBP</i>	35/37	36/38	normal
6	AAD-1332	A	<i>TBP</i>	37/37	38/38	normal
3	AAD-1333	A	<i>TBP</i>	35/37	36/38	normal
7	AAD-1335	A	<i>TBP</i>	36/37	37/38	normal
2	AAD-1336	A	<i>TBP</i>	36/36	37/37	normal
2	AAD-1340	A	<i>TBP</i>	35/37	36/38	normal
7	AAD-1341	A	<i>TBP</i>	34/37	35/38	normal
2	AAD-1342	A	<i>TBP</i>	36/37	38/38	normal
5	AAD-1347	A	<i>TBP</i>	36/37	37/38	normal
4	AAD-1349	A	<i>TBP</i>	35/36	36/37	normal
3	AAD-1350	A	<i>TBP</i>	37/38	38/39	normal
4	AAD-1351	A	<i>TBP</i>	35/37	36/38	normal
3	AAD-1352	A	<i>TBP</i>	34/37	35/38	normal
7	AAD-1352	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1353	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-1354	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-1355	A	<i>TBP</i>	35/36	37/37	normal
5	AAD-1356	A	<i>TBP</i>	34/43	35/44	normal
7	AAD-1358	A	<i>TBP</i>	34/37	35/38	normal
4	AAD-1359	A	<i>TBP</i>	35/38	36/39	normal
5	AAD-1360	A	<i>TBP</i>	35/37	36/38	normal
13	AAD-1362	A	<i>TBP</i>	32/37	33/38	normal

4	AAD-1363	A	<i>TBP</i>	35/37	36/38	normal
5	AAD-1364	A	<i>TBP</i>	35/38	36/39	normal
1	AAD-1367	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-1371	A	<i>TBP</i>	35/36	37/37	normal
1	AAD-1378	A	<i>TBP</i>	35/35	36/36	normal
1	AAD-1379	A	<i>TBP</i>	34/35	36/36	normal
1	AAD-1380	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-1383	A	<i>TBP</i>	38/39	39/40	normal
1	AAD-1385	A	<i>TBP</i>	35/37	36/38	normal
7	AAD-1386	A	<i>TBP</i>	37/38	38/39	normal
8	AAD-1387	A	<i>TBP</i>	36/38	37/39	normal
1	AAD-1398	A	<i>TBP</i>	36/37	38/38	normal
3	AAD-1398	A	<i>TBP</i>	35/37	36/38	normal
346	AAD-1398	A	<i>TBP</i>	34/37	35/38	normal
1	AAD-1407	A	<i>TBP</i>	35/42	36/43	normal
1	AAD-1410	A	<i>TBP</i>	35/36	37/37	normal
9	AAD-386	A	<i>TBP</i>	31/39	32/40	normal
7	AAD-481	A	<i>TBP</i>	28/37	29/38	normal
10	AAD-481	A	<i>TBP</i>	35/37	36/38	normal
3	AAD-723	A	<i>TBP</i>	37/38	38/39	normal
13	AAD-723	A	<i>TBP</i>	37/38	38/39	normal
7	AAD-726	A	<i>TBP</i>	38/38	39/39	normal
10	AAD-729	A	<i>TBP</i>	37/37	38/38	normal
5	AAD-736	A	<i>TBP</i>	36/37	37/38	normal
3	AAD-928	A	<i>TBP</i>	36/37	37/38	normal
20	AAD-928	A	<i>TBP</i>	36/37	38/38	normal
8	AAD-935	A	<i>TBP</i>	34/35	35/36	normal
1	AAD-952	A	<i>TBP</i>	31/35	32/36	normal
1	AAD-958	A	<i>TBP</i>	30/37	31/38	normal
7	AAD-960	A	<i>TBP</i>	36/37	37/38	normal
20	AAD-960	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-961	A	<i>TBP</i>	36/37	38/38	normal
2	AAD-961	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-963	A	<i>TBP</i>	35/36	36/37	normal
1	AAD-966	A	<i>TBP</i>	35/37	36/38	normal
6	AAD-967	A	<i>TBP</i>	36/37	37/38	normal
8	AAD-967	A	<i>TBP</i>	35/37	36/38	normal
1	AAD-968	A	<i>TBP</i>	34/37	35/38	normal
1	AAD-972	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-972	A	<i>TBP</i>	35/37	36/38	normal
4	AAD-973	A	<i>TBP</i>	36/37	37/38	normal
1	AAD-976	A	<i>TBP</i>	35/37	36/38	normal
2	AAD-976	A	<i>TBP</i>	36/37	38/38	normal
1	AAD-978	A	<i>TBP</i>	31/37	32/38	normal
6	AAD-979	A	<i>TBP</i>	36/37	37/38	normal

5	AAD-997	A	<i>TBP</i>	35/36	36/37	normal
6	AAD-997	A	<i>TBP</i>	36/38	37/39	normal
8	AAD-997	A	<i>TBP</i>	35/36	37/37	normal
1	AAD-999	A	<i>TBP</i>	35/37	36/38	normal
7	AAR-319	A	<i>TBP</i>	34/35	36/36	normal
1	AAR-549	A	<i>TBP</i>	32/35	33/36	normal
3	AAR-875	A	<i>TBP</i>	36/37	37/38	normal
3	AAR-880	A	<i>TBP</i>	35/36	37/37	normal
5	AAR-886	A	<i>TBP</i>	36/37	38/38	normal
3	AAR-887	A	<i>TBP</i>	34/36	35/37	normal
1	AAR-895	A	<i>TBP</i>	35/39	36/40	normal
24	FPD-1051	A	<i>TBP</i>	35/36	36/37	normal
1	FSP-1177	A	<i>TBP</i>	35/37	36/38	normal
5	FSP-1304	A	<i>TBP</i>	34/37	35/38	normal
1	FSP-1305	A	<i>TBP</i>	36/37	37/38	normal
2	FSP-1305	A	<i>TBP</i>	36/37	37/38	normal
1	FSP-1307	A	<i>TBP</i>	35/36	37/37	normal
7	FSP-1308	A	<i>TBP</i>	36/37	37/38	normal
11	FSP-1308	A	<i>TBP</i>	36/37	37/38	normal
3	FSP-403	A	<i>TBP</i>	36/37	37/38	normal
25	SAL-025	A	<i>TBP</i>	35/36	36/37	normal
1069	SAL-1069	A	<i>TBP</i>	34/35	35/36	normal
167	SAL-167	A	<i>TBP</i>	35/36	36/37	normal
4	SAL-307	A	<i>TBP</i>	35/36	36/37	normal
5	SAL-307	A	<i>TBP</i>	35/38	36/39	normal
7	SAL-307	A	<i>TBP</i>	36/37	37/38	normal
780	SAL-780	A	<i>TBP</i>	36/37	38/38	normal
904	SAL-904	A	<i>TBP</i>	35/36	36/37	normal
995	SAL-995	A	<i>TBP</i>	35/37	36/38	normal
13	AAD-1020	B	<i>TBP</i>	36/37		normal
1	AAD-1045	B	<i>TBP</i>	34/35		normal
1	AAD-1159	B	<i>TBP</i>	36/37		normal
B0152	AAD-1213	B	<i>TBP</i>	34/35		normal
B0153	AAD-1213	B	<i>TBP</i>	37/40		normal
9	AAD-1249	B	<i>TBP</i>	35/37		normal
1	AAD-1250	B	<i>TBP</i>	35/41		normal
B0254	AAD-1261	B	<i>TBP</i>	30/31		normal
1	AAD-1274	B	<i>TBP</i>	34/36		normal
1	AAD-1389	B	<i>TBP</i>	28/37		normal
10	AAD-139	B	<i>TBP</i>	34/35		normal
B0006	AAD-1397	B	<i>TBP</i>	36/37		normal
3	AAD-1399	B	<i>TBP</i>	35/35		normal
2	AAD-1421	B	<i>TBP</i>	35/37		normal
9	AAD-369	B	<i>TBP</i>	37/37		normal
3	AAD-377	B	<i>TBP</i>	36/37		normal

3	AAD-533	B	TBP	38/39		normal
6	AAD-566	B	TBP	34/37		normal
9	AAD-566	B	TBP	34/40		normal
10	AAD-566	B	TBP	34/37		normal
7	AAD-569	B	TBP	36/41		normal
5	AAD-635	B	TBP	35/39		normal
10	AAD-683	B	TBP	37/37		normal
12	AAD-683	B	TBP	36/37		normal
14	AAD-683	B	TBP	36/37		normal
15	AAD-683	B	TBP	37/38		normal
16	AAD-683	B	TBP	36/37		normal
5	AAD-743	B	TBP	37/38		normal
7	AAD-743	B	TBP	36/37		normal
B0080	AAD-743	B	TBP	36/37		normal
7	AAD-748	B	TBP	35/38		normal
1	AAD-834	B	TBP	36/37		normal
8	AAD-861	B	TBP	36/37		normal
4	AAD-891	B	TBP	30/35		normal
23	AAD-908	B	TBP	35/37		normal
B0079	AAD-908	B	TBP	35/37		normal
B0083	AAD-949	B	TBP	36/37		normal
8	AAD-971	B	TBP	36/37		normal
3	AAR-242	B	TBP	36/37		normal
5	AAR-500	B	TBP	35/38		normal
16	AAR-512	B	TBP	35/37		normal
1	AAR-676	B	TBP	36/37		normal
1	AAR-740	B	TBP	37/38		normal
B0149	AAR-860	B	TBP	35/36		normal
B0229	AAR-895	B	TBP	35/39		normal
10	AAR-912	B	TBP	37/38		normal
B0194	AGE-028	B	TBP	37/39		normal
B0039	B0039	B	TBP	37/38		normal
B0040	B0040	B	TBP	36/37		normal
B0047	B0047	B	TBP	28/37		normal
B0071	B0071	B	TBP	36/37		normal
B0126	B0126	B	TBP	37/38		normal
B0146	B0146	B	TBP	36/37		normal
B0164	B0164	B	TBP	35/37		normal
B0168	B0168	B	TBP	35/37		normal
B0171	B0171	B	TBP	36/37		normal
B0198	B0198	B	TBP	36/37		normal
B0199	B0199	B	TBP	35/36		normal
B0215	B0215	B	TBP	35/37		normal
B0244	B0244	B	TBP	35/38		normal
B0247	B0247	B	TBP	34/37		normal

B0250	B0250	B	TBP	31/38		normal
B0253	B0253	B	TBP	36/37		normal
B0278	B0278	B	TBP	36/37		normal
1	CMT-234	B	TBP	36/37		normal
4	CMT-234	B	TBP	37/40		normal
16	CMT-234	B	TBP	35/37		normal
1	DFT-315	B	TBP	34/37		normal
9	DFT-326	B	TBP	35/36		normal
18	ENE-013	B	TBP	36/37		normal
9	FSP-006	B	TBP	34/35		normal
11	FSP-006	B	TBP	35/40		normal
13	FSP-006	B	TBP	34/35		normal
14	FSP-006	B	TBP	35/37		normal
20	FSP-056	B	TBP	36/37		normal
21	FSP-056	B	TBP	36/37		normal
1	FSP-078	B	TBP	36/37		normal
13	FSP-088	B	TBP	29/37		normal
1	FSP-1009	B	TBP	36/37		normal
4	FSP-1044	B	TBP	36/37		normal
1	FSP-1048	B	TBP	36/37		normal
5	FSP-1057	B	TBP	35/37		normal
7	FSP-1057	B	TBP	35/36		normal
8	FSP-1059	B	TBP	32/36		normal
1	FSP-1060	B	TBP	36/37		normal
4	FSP-1062	B	TBP	36/37		normal
1	FSP-1063	B	TBP	33/37		normal
5	FSP-1064	B	TBP	35/39		normal
6	FSP-1065	B	TBP	37/37		normal
6	FSP-1066	B	TBP	36/37		normal
3	FSP-1067	B	TBP	35/36		normal
12	FSP-1070	B	TBP	35/37		normal
3	FSP-1071	B	TBP	31/35		normal
11	FSP-1072	B	TBP	36/38		normal
1	FSP-1073	B	TBP	35/37		normal
10	FSP-1073	B	TBP	35/37		normal
1	FSP-1076	B	TBP	37/38		normal
9	FSP-1081	B	TBP	35/37		normal
3	FSP-1096	B	TBP	34/36		normal
5	FSP-1098	B	TBP	36/37		normal
4	FSP-1100	B	TBP	35/36		normal
4	FSP-1101	B	TBP	35/37		normal
1	FSP-1102	B	TBP	31/37		normal
3	FSP-1105	B	TBP	35/36		normal
3	FSP-1107	B	TBP	36/37		normal
4	FSP-1109	B	TBP	36/37		normal

7	FSP-1110	B	TBP	36/37		normal
7	FSP-1111	B	TBP	34/38		normal
3	FSP-1113	B	TBP	35/37		normal
1	FSP-1117	B	TBP	34/37		normal
4	FSP-1120	B	TBP	35/37		normal
1	FSP-1124	B	TBP	37/38		normal
2	FSP-1124	B	TBP	36/38		normal
22	FSP-1130	B	TBP	35/36		normal
15	FSP-1131	B	TBP	31/37		normal
3	FSP-1136	B	TBP	36/39		normal
1	FSP-1145	B	TBP	36/37		normal
4	FSP-1147	B	TBP	36/39		normal
3	FSP-1148	B	TBP	34/37		normal
1	FSP-1149	B	TBP	35/36		normal
1	FSP-1151	B	TBP	35/37		normal
4	FSP-1152	B	TBP	35/37		normal
5	FSP-1153	B	TBP	37/38		normal
1	FSP-1155	B	TBP	38/39		normal
1	FSP-1157	B	TBP	36/38		normal
1	FSP-1164	B	TBP	37/38		normal
1	FSP-1171	B	TBP	35/36		normal
3	FSP-1172	B	TBP	34/37		normal
3	FSP-1174	B	TBP	35/36		normal
1	FSP-1176	B	TBP	35/37		normal
3	FSP-1178	B	TBP	37/37		normal
1	FSP-1179	B	TBP	35/36		normal
7	FSP-1181	B	TBP	33/39		normal
1	FSP-1182	B	TBP	36/37		normal
1	FSP-1185	B	TBP	36/37		normal
1	FSP-1186	B	TBP	36/37		normal
1	FSP-1187	B	TBP	35/37		normal
1	FSP-1188	B	TBP	38/38		normal
1	FSP-1189	B	TBP	36/37		normal
1	FSP-1191	B	TBP	35/37		normal
1	FSP-1193	B	TBP	37/37		normal
1	FSP-1194	B	TBP	37/38		normal
1	FSP-1288	B	TBP	35/37		normal
2	FSP-1308	B	TBP	35/37		normal
3	FSP-1308	B	TBP	34/35		normal
1	FSP-1359	B	TBP	37/38		normal
1	FSP-1426	B	TBP	31/38		normal
1	FSP-1433	B	TBP	35/36		normal
2	FSP-1452	B	TBP	35/37		normal
1	FSP-1455	B	TBP	35/38		normal
1	FSP-1458	B	TBP	38/39		normal

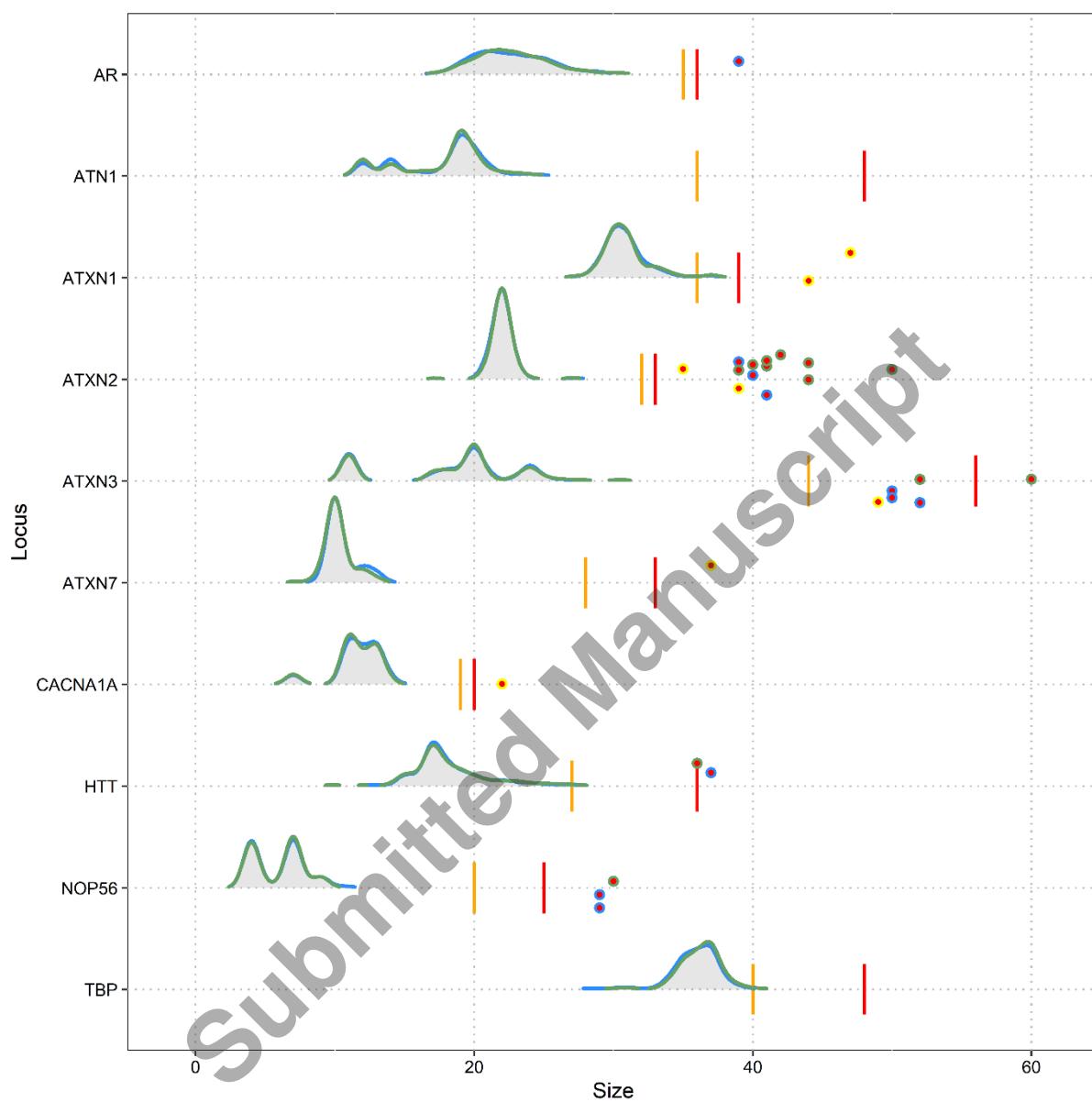
1	FSP-1459	B	TBP	35/38		normal
1	FSP-1467	B	TBP	35/36		normal
1	FSP-1470	B	TBP	35/37		normal
1	FSP-1480	B	TBP	35/36		normal
1	FSP-1482	B	TBP	35/36		normal
1	FSP-1499	B	TBP	36/37		normal
1	FSP-1500	B	TBP	36/38		normal
1	FSP-1506	B	TBP	36/37		normal
1	FSP-1507	B	TBP	35/37		normal
2	FSP-1507	B	TBP	34/37		normal
1	FSP-1509	B	TBP	36/37		normal
1	FSP-1510	B	TBP	36/37		normal
1	FSP-1515	B	TBP	35/37		normal
1	FSP-1529	B	TBP	36/37		normal
1	FSP-1531	B	TBP	35/37		normal
1	FSP-1537	B	TBP	34/35		normal
1	FSP-1540	B	TBP	34/36		normal
1	FSP-1544	B	TBP	37/39		normal
1	FSP-1546	B	TBP	37/38		normal
B0110	FSP-1547	B	TBP	35/36		normal
1	FSP-1548	B	TBP	36/37		normal
1	FSP-1558	B	TBP	36/37		normal
1	FSP-1560	B	TBP	34/38		normal
4	FSP-1568	B	TBP	35/36		normal
5	FSP-1568	B	TBP	35/36		normal
2	FSP-1569	B	TBP	35/36		normal
B0022	FSP-1570	B	TBP	36/37		normal
3	FSP-1573	B	TBP	36/37		normal
5	FSP-1576	B	TBP	36/37		normal
1	FSP-1579	B	TBP	36/37		normal
6	FSP-1582	B	TBP	35/35		normal
8	FSP-1582	B	TBP	35/38		normal
3	FSP-1584	B	TBP	35/36		normal
10	FSP-1585	B	TBP	34/35		normal
1	FSP-1586	B	TBP	34/36		normal
2	FSP-1588	B	TBP	37/38		normal
4	FSP-1592	B	TBP	34/37		normal
1	FSP-1593	B	TBP	36/38		normal
3	FSP-1593	B	TBP	37/38		normal
13	FSP-1594	B	TBP	37/41		normal
6	FSP-1595	B	TBP	35/37		normal
7	FSP-1600	B	TBP	36/37		normal
6	FSP-1634	B	TBP	36/37		normal
2	FSP-1636	B	TBP	35/37		normal
3	FSP-1638	B	TBP	36/37		normal

B0037	FSP-258	B	TBP	36/37		normal
10	FSP-405	B	TBP	36/37		normal
11	FSP-455	B	TBP	34/35		normal
B0241	FSP-491	B	TBP	36/37		normal
B0182	FSP-820	B	TBP	37/38		normal
18	FSP-929	B	TBP	34/37		normal
6	FSP-985	B	TBP	34/35		normal
4	ITD-539	B	TBP	36/37		normal
10	ITD-868	B	TBP	35/36		normal
B0068	ITD-868	B	TBP	35/36		normal
B0109	PED-1526	B	TBP	35/36		normal
1057	SAL-105	B	TBP	34/35		normal
1053	SAL-1053	B	TBP	36/37		normal
1070	SAL-107	B	TBP	36/37		normal
1082	SAL-108	B	TBP	36/37		normal
1083	SAL-1083	B	TBP	35/36		normal
1085	SAL-1085	B	TBP	35/37		normal
1086	SAL-1086	B	TBP	35/37		normal
1088	SAL-1088	B	TBP	36/38		normal
1089	SAL-1089	B	TBP	35/38		normal
1098	SAL-109	B	TBP	36/37		normal
1090	SAL-1090	B	TBP	36/37		normal
1	SAL-1100	B	TBP	35/36		normal
3	SAL-1100	B	TBP	36/37		normal
1101	SAL-1101	B	TBP	37/37		normal
113	SAL-113	B	TBP	35/36		normal
B0233	SAL-113	B	TBP	36/37		normal
4	SAL-1603	B	TBP	34/36		normal
B0117	SAL-1606	B	TBP	38/39		normal
2	SAL-2806	B	TBP	37/37		normal
18	SAL-315	B	TBP	35/36		normal
22	SAL-315	B	TBP	35/37		normal
24	SAL-315	B	TBP	35/36		normal
26	SAL-315	B	TBP	35/36		normal
32	SAL-315	B	TBP	35/37		normal
38	SAL-315	B	TBP	37/38		normal
40	SAL-315	B	TBP	37/38		normal
B0169	SAL-315	B	TBP	35/38		normal
646	SAL-646	B	TBP	29/39		normal
650	SAL-650	B	TBP	37/40		normal
654	SAL-654	B	TBP	36/39		normal
713	SAL-713	B	TBP	37/39		normal
789	SAL-789	B	TBP	34/37		normal
4	SAL-866	B	TBP	36/38		normal
7	SAL-866	B	TBP	32/35		normal

872	SAL-872	B	<i>TBP</i>	36/37		normal
874	SAL-874	B	<i>TBP</i>	36/37		normal
878	SAL-878	B	<i>TBP</i>	36/37		normal
881	SAL-881	B	<i>TBP</i>	37/39		normal
883	SAL-883	B	<i>TBP</i>	36/37		normal
887	SAL-887	B	<i>TBP</i>	35/37		normal
891	SAL-891	B	<i>TBP</i>	28/36		normal
892	SAL-892	B	<i>TBP</i>	35/37		normal
893	SAL-893	B	<i>TBP</i>	37/37		normal
900	SAL-900	B	<i>TBP</i>	36/37		normal
901	SAL-901	B	<i>TBP</i>	37/37		normal
902	SAL-902	B	<i>TBP</i>	35/37		normal
905	SAL-905	B	<i>TBP</i>	37/38		normal
906	SAL-906	B	<i>TBP</i>	35/38		normal
1	SAL-919	B	<i>TBP</i>	30/36		normal
2	SAL-919	B	<i>TBP</i>	36/37		normal
919	SAL-919	B	<i>TBP</i>	30/36		normal

Supplementary figure. Allele size density repeat number distribution by *ExpansionHunter*

for each locus of interest in two runs of exomes (498 patients + 7 known expansion carriers).



Blue color for the exome run A, green for the run B, outliers are red points for expanded alleles with color line from the exome runs or yellow for positive known expansion carriers added to the run B, vertical lines for intermediate and pathogenic threshold sizes from *GeneReviews* are respectively in red and orange.