

Table S3 : Runs of homozygosity segments shared by over 50% of Thoroughbreds.

Chr.	Length (MB)	Begin	End	Annotated genes
1	0.59	841540	1435208	<i>CFAP46, NKX6-2, INPP5A, PWWP2B</i>
1	1.14	22010452	23149101	-
1	0.17	33184195	33356486	<i>ZNF518A, CCNJ, CC2D2B</i>
1	0.02	33371412	33394390	<i>CC2D2B</i>
1	0.38	33415244	33792526	<i>ENTPD1, TCTN3, ALDH18A1, SORBS1</i>
1	0.37	41105674	41472996	<i>PAPSS2, MINPP1, SGMS1</i>
1	0.43	46911137	47336515	-
1	0.03	47375634	47405427	-
1	0.39	47421744	47812471	-
1	0.22	68536819	68761749	-
1	0.23	68768009	68999855	<i>URB2, TAF5L, ABCB10, NUP133, ACTA1</i>
1	0.45	71888373	72334036	<i>BMS1, ZNF248</i>
1	0.68	85013819	85690537	<i>GRID1</i>
1	0.64	93639301	94280015	<i>CRTC3, BLM, FURIN, FES, MAN2A2, HDDC3, UNC45A, RCCD1, PRC1, VPS33B, NGRN, GDPGP1, CIB1, SEMA4B, IDH2, ZNF710</i>
1	0.37	112717075	113088084	<i>GABRB3</i>
1	0.17	113530630	113703332	<i>GABRG3</i>
1	0.10	113767681	113866140	<i>GABRG3</i>
1	0.05	113952712	114006066	-
1	0.00	123226504	123229881	-
2	0.41	64662562	65067588	-
2	0.10	65086799	65187559	-
3	0.36	22526491	22886805	<i>DHX38, TXNL4B, DHODH, PKD1L3, IST1, ZNF821, ATXN1L, AP1G1, PHLPP2</i>
3	0.63	23444991	24072266	<i>HYDIN, VAC14, MTSS1L, IL34, SF3B3, COG4, FUK, ST3GAL2, AARS, EXOSC6, CLEC18B</i>
3	0.55	40028601	40581467	<i>DNAJB14, LAMTOR3, DAPP1, MTPP, TRMT10A</i>
3	0.13	58442558	58572539	-
4	0.78	15528412	16305907	<i>CCM2, NACAD, TBG4, RAMP3, ADCY1, IGFBP1, IGFBP3</i>
4	0.49	44067176	44558669	<i>NDUFA4, PHF14</i>
4	0.01	44578375	44592736	-
4	0.99	52210255	53198512	<i>MACC1, ITGB8, ABCB5, SP8</i>
4	0.04	55776953	55819015	-
5	0.81	52075884	52883274	<i>SLC16A1, FAM19A3, PPM1J, RHOC, MOV10, CAPZA1, ST7L, WNT2B, CTTNBP2NL,</i>
5	0.15	54254470	54401315	<i>KCNA2, KCNA10, PROK1</i>
5	0.01	54467121	54473450	-
5	0.60	54607188	55203319	<i>SLC6A17, UBL4B, ALX3, STRIP1, AHCYL1, CSF1, EPS8L3, GSTM3, AMPD2, GNAT2, MIR197, GNAI3, GPR61, AMIGO1, ATXN7L2</i>
6	1.13	21644998	22775700	<i>AGAP1, GBX2, ASB18, IQCA1, ACKR3</i>
6	0.84	23669396	24511131	<i>LRRFIP1, RBM44, RAMP1, UBE2F, SCLY, ESPNL, KLHL30, ERFE, ILKAP, HES6, PER2, TRAF3IP1</i>
6	0.09	42866900	42960667	-
6	0.00	42965882	42966523	-
6	0.40	43084381	43480499	<i>ATF7IP, PLBD1, GUCY2C, WBP11, SMCO3, ART4</i>
6	0.52	68244053	68766546	<i>FMNL3, TMBIM6, NCKAP5L, BCDIN3D, FAIM2, AQP2, AQP5, AQP6, RACGAP1, ASIC1, SMARCD1, GPD1, CERS5, LIMA1</i>
6	0.61	70863528	71473496	<i>KRT8, KRT18, EIF4B, TNS2, SPRYD3, IGFBP6, SOAT2, CSAD, ZNF740, ITGB7, RARG, MFSD5, ESPL1, PFDN5, AAAS, SP7, SP1, AMHR2, PRR13, PCBP2, MAP3K12, TARBP2, NPFF, ATF7, ATP5MC2</i>
6	0.00	71855266	71855914	-
7	0.17	40386493	40560613	-
7	1.56	41434416	42997806	<i>NTM, OPCML</i>
7	1.02	43046689	44065860	<i>SPATA19, IGSF9B, JAM3, NCAPD3, VPS26B, ACAD8, THYN1, B3GAT1</i>
7	0.07	44109054	44181928	-
7	0.57	44418390	44988705	-

Additional Table 3 - continued

7	0.45	45886267	46334427	<i>ADGRE5, ADGRL1, PRKACA, SAMD1, MISP3, PALM3, IL27RA, RLN3, MIR1271B, RFX1, DCAF15, PODNL1, CC2D1A, NANOS3, ZSWIM4, MRI1, CCDC130</i>
7	0.96	46961963	47917776	<i>MAN2B1</i>
8	0.65	44239408	44892092	<i>ENOSF1, YES1, ADCYAP1</i>
9	0.44	67863639	68304060	<i>ATAD2, WDYHV1, FBXO32, KLHL38, ANXA13, FAM91A1, FER1L6</i>
9	0.02	70089528	70111792	-
10	0.01	15133223	15146131	-
11	0.50	2407702	2910649	<i>RPTOR, NPTX1, ENDOV, RNF213, SLC26A11, SGSH, CARD14, EIF4A3, GAA, CCDC40, TBC1D16</i>
11	0.05	23186362	23238557	<i>PLXDC1</i>
12	0.49	36456898	36942815	<i>MOB2, DUSP8, RNH1, PTDSS2, ANO9, SIGIRR, PKP3, B4GALNT4, IFITM5, PGGHG, NLRP6, PSMD13</i>
14	0.42	15982846	16398029	<i>MAT2B, HMMR, NUDCD2, CCNG1</i>
14	0.03	16437615	16467602	-
14	0.36	27144280	27500357	<i>PDGFRB, CSF1R, HMGXB3, TIGD6, SLC26A2, PDE6A, PPARGC1B</i>
14	0.99	40943485	41931301	<i>VDAC1, FSTL4, HSPA4, ZCCHC10</i>
14	0.49	41989512	42478605	<i>AFF4, LEAP2, GDF9, SHROOM1, SOWAHA, SEPT8, KIF3A, IL4, IL13, RAD50, IL5, IRF1, SLC22A5</i>
14	0.51	46642345	47156636	<i>MEGF10, MARCH3, LMNB1, TEX43, PHAX, ALDH7A1</i>
16	0.38	34619130	34998423	<i>CACNA2D3</i>
16	0.27	35029621	35299636	<i>CACNA2D3</i>
16	0.02	35321893	35341801	-
16	0.92	35390401	36312167	<i>SELENOK, ACTR8, IL17RB, CHDH, CACNA1D, DCP1A, TKT, PRKCD, RFT1, SFMBT1</i>
17	2.04	20626515	22665932	<i>KCNRG, TRIM13, SPRYD7, KPNA3, EBPL, ARL11, RCBTB1, SETDB2, CAB39L, CDADC1, MLNR, FNDC3A, CYSLTR2, RCBTB2, RB1, LPAR6, ITM2B</i>
18	0.06	30087303	30146071	-
18	0.18	42472474	42650850	<i>DPP4, GCG, FAP</i>
18	0.08	49443663	49527351	<i>UBR3</i>
18	0.82	49579653	50401745	<i>UBR3, MYO3B, SP5, ERICH2, GAD1, GORASP2, TLK1</i>
18	0.44	66605255	67042719	<i>MSTN, HIBCH, INPP1, MFSD6, NEMP2</i>
21	0.02	55559098	55579756	-
21	0.16	55620187	55776417	-
21	0.04	55810398	55845927	-
21	0.45	56708164	57162831	<i>IRX2</i>
22	0.56	1154739	1712638	<i>SYNDIG1</i>
23	0.77	33553984	34327444	<i>NFIB, ZDHHC21</i>