**Additional file 1**

**Table S1. PCR and sequencing primers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exon | Primers | Primer sequence | Tm | PCR product |
| *ASIP*exon1 | *ASIP*exon1F | acctgcctgactgccttc | 60°C | 253bp |
| *ASIP*exon1R | ccttctcatgggctggag |
| *ASIP*exon2 | *ASIP*exon2F | tgagtcccctccactcct | 60°C | 202bp |
| *ASIP*exon2R | tcctagccagagcttgagg |
| *ASIP*exon3 | *ASIP*exon3F | cggcctccatagtccaaag | 60°C | 419bp |
| *ASIP*exon3R | cccgcctcctagaagctc |

F: forward. R: reverse. Tm: melting temperature. bp: base pairs.

**Table S2. Genomic variants in *ASIP* identified between donkey sequences and the horse reference sequence**

|  |  |  |
| --- | --- | --- |
|  | c.349T>C  exon 3 | c.\*4C>A  3’UTR |
| Ensembl equine sequence | T | C |
| NLP Normand 1 | *C/C* | *C/C* |
| NLP Normand 2 | *C/C* | *C/C* |
| Bay Normand control 1 | *T/C* | *C/C* |
| Bay Normand control 2 | *T/T* | *C/A* |
| Consequence | p.(Cys117Arg) | p.(=) |
| Prediction | Damaging# |  |

NLP: no-light-points; #: Polyphen-2, SNAP and PROVEAN predictions.