Chromosome, haplotype position, and Breed(s) of interest Gene or feature ECA3:105,219,978-105,832,553 LCORL ligand dependent nuclear receptor corepressor-like Belgian NCAPG non-SMC condensin I complex, subunit G DCAF16 DDB1 and CUL4 assocaited factor 16 novel transcript unknown novel retrotransposed element novel pseudogene novel snRNA U6 splicosomal RNA ECA11:23,118,264-23,712,507 PLXDC1 plexin domain containing 1 Draft RPL23* ribosomal protein L23 FBXO47 F-box protein 47 ECA11:23,259,732-23,712,507 LASP1 LIM and SH3 protein 1 Draft and Miniature C17orf98 chromosome 17 open reading frame 98 CWC25 CWC25 spliceosome-associated protein homolog PIP4K2B phosphatidylinositol-5-phosphate 4-kinase, type II, beta PSMB3* proteasome (prosome, macropain) subunit, beta type, 3 PCGF2 polycomb group ring finger 2 CDGSH iron sulfur domain 3 CISD3 MLLT6 myeloid/lymphoid or mixed-lineage leukemia SRCIN1 SRC kinase signaling inhibitor 1 SOCS7 suppressor of cytokine signaling 7 **GPR179** G protein-coupled receptor 179 unknown novel transcript snoRNA (2) ECA17:20,690,428-23,179,269 KCNRG potassium channel regulator Thoroughbred TRIM13 tripartite motif containing 13 SPRYD7 SPRY domain containing 7 KPNA3 karyopherin alpha 3 FBPI emopamil binding protein-like ARL11* ADP-ribosylation factor-like 11 RCBTB1 regulator of chromosome condensation & BTB domain containing protein 1 PHF11 PHD finger protein 11 SETDB2* SET domain, bifurcated 2 CAB39L calcium binding protein 39-like CDADC1 cytidine and dCMP deaminase domain containing 1 FNDC3A fibronectin type III domain containing 3A CYSLTR2 cysteinyl leukotriene receptor 2 regulator of chromosome condensation & BTB domain containing protein 2 RCBTB2 RB1 retinoblastoma 1 LPAR6* lysophosphatidic acid receptor 6 ITM2B integral membrane protein 2B MED4 mediator complex subunit 4 NUDT15 nudix-type motif 15 SUCLA2* succinate-CoA ligase, ADP-forming, beta subunit unknown (3) novel transcript novel pseudogene (3) microRNA (2) retrotransposed element (2) ECA18:66,038,428-66,819,112 SLC40A1 solute carrier family 40, member 1 Quarter Horse and Paint ASNSD1 asparagine synthetase domain containing 1 ANKAR ankyrin and armadillo repeat containing OSGEPI 1 O-sialoglycoprotein endopeptidase-like 1 ORMDL1 ORM1-like 1 PMS1 postmeiotic segregation increased 1 GDF8 growth/differentiation factor 8 precursor (myostatin) C2orf88 chromosome 2 open reading frame 88 HIBCH 3-hydroxyisobutyryl-CoA hydrolase INPP1 inositol polyphosphate-1-phosphatase MESD6 major facilitator superfamily domain containing 6 novel pseudogene

Table S2. Annotated genes (or other features) within high-frequency, extended haplotypes of interest.

*gene identity predicted from orthologous sequence