

**Table S1. The 20 microsatellite markers used to determine overall genetic similarity**

The name of the markers, their chromosomal location, their primer sequences [1], the annealing temperature, the fluorophores we used, the number of alleles found in the present sample (N = 148), and the number of alleles previously observed in 311 world-wide distributed Hanoverian warmblood horses.

Name (chromosome)	Primer sequence (5'- 3')	Annealing temperature	Fluorophore	Number of alleles in present study	Number of alleles in Mittmann <i>et al.</i> [1]
VIAS-H34 (1)	GCTTTTGTTTCTCAATCCTAGC TGAAGTCAAATCCCTGCTTC	58°C	HEX	11	7
UMNe448 (2)	CCATTCTGCCCTGATTGG TTCAAGACCCCTCAATCTGC	55°C	FAM	6	6
AHT36 (3)	TGCTGCTCCAGTGTCTT TAGATTTACAGGCGGGTG	60°C	AT550	9	8
UMNe567 (5)	GGTGCAGCTGCTAGCTCAG AGACCCAGTCATTGGGAGG	60°C	FAM	6	4
LEX065 (6)	GAAGGCACAATTCAATCTACT GCCAGTCCCATTCTAAC	60°C	ATTO550	6	5
HTG4 (9)	CTATCTCAGTCTTCATTGCAGGAC CTCCCTCCCTCCCTCTGTTCTC	55°C	AT550	6	6

COR048 (10)	GATTGGGATGCAAAGATGAG CAAGAGGATTGGGAACAAAGG	58°C	FAM	8	6
UCD457 (11)	GGGGCGTGAGCATAAAGG CGCTGGATGAGTGAGGGA	60°C	FAM	12	10
COR069 (13)	AGGCAGCTTGACTACCCTGA AAAGTCTCCCCTGCGTGTT	58°C	ATTO550	8	7
UM010 (14)	TACAGCCATTGGAAATCTAC CACCATTACATTTTCCCAG	55°C	FAM	7	7
HMS20 (16)	TGAGTGTTTGCGTGTGTGTG TCCCGTCTCCTCTCTTGTC	58°C	FAM	6	5
TKY924 (17)	TTCACCTATGAGTTTGAGGTA CGTCATAATGCAGACTCTTTG	55°C	HEX	5	4
TKY101 (18)	TCTGAAATACCGTGTGCCT TTCTGCCTCCCTCCAAC TTT	55°C	FAM	9	8
TKY582 (22)	AGCCACCAGTCTGTTCTCTG AATGTCCTTTGGTGGATGAAC	58°C	HEX	6	7
UCD405 (25)	ACCTCGTCTGGCTGTTGTAAG ACTTGCTGTGCGACTCTG	60°C	HEX	9	9

UM005 (26)	CCCTACCTGAAATGAGAATTG GGCAAAAGATCAGGCCAT	55°C	HEX	7	7
TKY315 (27)	GATGCCTCGAACTAGCTTG GATCTTCCATGTTTTGTTGG	55°C	FAM	8	8
TKY333 (28)	CCTTCACTAGCCTTCAAATG TTGTGTTTAGACAGTGCTGC	55°C	FAM	11	8
COR082 (29)	TGGGAGAGGTACCTGAAATGTAC GTTGCTATAAAAAATTGTCTCCCTAC	55°C	ATTO550	9	7
AHT34 (31)	CTCAGGGCGAATGTTCTC CCCCACCATGAGTCAAAAAC	60°C	FAM	9	7

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## Reference

1. Mittmann E.H., Lampe V., Mömke S., Zeitz A., Distl O. 2010 Characterization of a minimal microsatellite set for whole genome scans informative in warmblood and coldblood horse breeds. *J. Hered.* **101**(2), 246–250. (doi:10.1093/jhered/esp091).