

1 **Supplementary Table S1.** Nei's genetic distance (DA) values among the four Mongolian horse
 2 populations

	Province types			
	KTP	USP	GOP	KGP
KTP	-			
USP	0.0535	-		
GOP	0.1022	0.1188	-	
KGP	0.1258	0.1154	0.1797	

3 KTP, Khentii province; USP, Uvs province; GOP, Omnogovi and Dundgovi province; KGP, Khovsgol province.
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6 **Supplementary Table S2.** The mean likelihoods of models and standard deviation, and Delta K value
 7 using the Evanno method

K	Reps	Mean LnP(K)	StdevLnP(K)	Ln' (K)	Ln''(K)	Delta K
2	10	-13462.080000	0.198886	-	-	-
3	10	-13311.740000	24.583382	150.340000	33.790000	1.374506
4	10	-13195.190000	1.234189	116.550000	-	

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