

Table S1. Details on the samples used in this study

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC1	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC2	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC3	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC4	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC5	HHH	x	x	*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC6	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC7	HHH	x	x	*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC8	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC9	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC10	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC11	HHH	x	x	*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC12	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC13	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC14	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC15	HHH	x	x	*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC16	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC17	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC18	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC19	HHH	x		*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC21	HHH	x	x	*	Mandal-Ovoo soum, Umnugobi province	Blood
MDC23	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC24	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC25	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC26	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC27	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC28	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC29	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC30	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC31	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC32	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC33	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC36	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC37	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC38	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC39	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC40	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC41	HHH	x	x		Mandal-Ovoo soum, Umnugobi province	Blood
MDC42	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC43	HHH	x			Mandal-Ovoo soum, Umnugobi province	Blood
MDC44	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC45	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC46	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC47	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC48	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC49	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC50	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC51	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC52	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC53	HZ	x	x	*	Tugrug soum, Gobi-Altai province	Blood
MDC54	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC55	HZ	x	x	*	Tugrug soum, Gobi-Altai province	Blood
MDC56	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC57	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC59	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC60	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC61	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC62	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC63	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC64	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC65	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC66	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC67	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC68	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC69	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC70	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC71	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC72	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC73	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC74	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC75	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC76	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC77	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC78	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC79	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC80	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC81	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC82	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC83	HZ	x	x		Tugrug soum, Gobi-Altai province	Blood
MDC84	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC85	HZ	x		*	Tugrug soum, Gobi-Altai province	Blood
MDC86	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC87	HZ	x			Tugrug soum, Gobi-Altai province	Blood
MDC88	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC89	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC90	GGU	x			Hanbogd soum, Umnugobi province	Blood

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC91	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC92	GGU	x		*	Hanbogd soum, Umnugobi province	Blood
MDC93	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC94	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC95	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC96	GGU	x	x	*	Hanbogd soum, Umnugobi province	Blood
MDC97	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC98	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC99	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC100	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC101	GGU	x		*	Hanbogd soum, Umnugobi province	Blood
MDC102	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC104	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC105	GGU	x		*	Hanbogd soum, Umnugobi province	Blood
MDC106	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC107	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC108	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC109	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC110	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC111	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC112	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC113	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC114	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC115	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC117	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC118	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC119	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC120	GGU	x	x		Hanbogd soum, Umnugobi province	Blood
MDC122	GGU	x			Hanbogd soum, Umnugobi province	Blood

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC124	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC125	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC126	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC127	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC128	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC129	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC130	GGU	x			Hanbogd soum, Umnugobi province	Blood
MDC131	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC132	MNT	x		*	Aldarkhaan soum, Zavhan province	Blood
MDC133	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC134	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC135	MNT	x		*	Aldarkhaan soum, Zavhan province	Blood
MDC137	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC138	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC139	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC140	MNT	x	x	*	Aldarkhaan soum, Zavhan province	Blood
MDC141	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC142	MNT	x	x	*	Aldarkhaan soum, Zavhan province	Blood
MDC143	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC144	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC145	MNT	x		*	Aldarkhaan soum, Zavhan province	Blood
MDC146	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC147	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC148	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC149	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC150	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC152	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC153	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC154	MNT	x			Aldarkhaan soum, Zavhan province	Blood

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
MDC155	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
MDC156	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC157	MNT	x			Aldarkhaan soum, Zavhan province	Blood
MDC159	MNT	x	x		Aldarkhaan soum, Zavhan province	Blood
DC36	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC53	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC54	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC56	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC57	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC58	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC59	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC60	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC61	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC62	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC63	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC64	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC65	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC66	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC67	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC68	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC69	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC70	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC71	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC72	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC73	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC74	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC75	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC76	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC77	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
DC80	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC81	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC82	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC83	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC84	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC87	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC88	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC90	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC92	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC93	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC94	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC95	MNT	x	x	*	Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC96	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC98	MNT	x	x		Zahiin us, Tsogt soum, Gobi-Altai province	hair
DC137	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC145	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC157	MNT	x	x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC175	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC176	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC178	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC180	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC186	MNT	x	x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC188	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC191	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC198	MNT	x	x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC199	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC201	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC203	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair
DC204	MNT		x		Gobi "B", Bugat soum, Gobi-Altai province	hair

Lab #	Line	$\mu$ sat	mtDNA	index (r) > 0.5	Collection place	Type of samples
DC205	MNT		x		Gobi “B”, Bugat soum, Gobi-Altai province	hair
DC250	MNT-NW	x	x		Baruunturuun soum, Uvs province	hair
DC251	MNT-NW	x	x		Baruunturuun soum, Uvs province	hair
DC253	MNT-NW	x	x		Baruunturuun soum, Uvs province	hair
DC254	MNT-NW	x	x		Baruunturuun soum, Uvs province	hair
Total		193	102	43		

GGU = Galbiin Gobiin Ulaan; HHH = Haniin Hetsiin Huren; HZ = Hos Zogdort; MNT = Mongolian native camels (Aldarkhaan, Zahiin us, Gobi “B”); MNT-NW = Western Mongolian native camels; x = complete profile available for the 17 microsatellite markers ( $\mu$ sat) and/ or the 803-bp mitochondrial segment (mtDNA); \* = individuals with a relatedness index (r) above 0.5, which were removed from subsequent analyses. Relatedness indexes were inferred in COANCESTRY software.