

Table S1. List of species and hybrids examined in this study.

Species name	Common name	Sex	Species ID	Location*	Date of Collection	Sample type
<i>Equus asinus somalicus</i>	African wild ass	F	KB6132	San Diego Zoo, SD	October, 1996	--
<i>Equus asinus</i>	Domestic ass	M	KB5101	Imperial Ranch, NE	March, 1988	Skin biopsy
<i>Equus caballus</i>	Domestic horse	M	OR535	--	--	Testes
<i>Equus caballus</i>	Domestic horse	F	OR225	--	July, 1977	Spleen
<i>Equus grevyi</i>	Grevy's zebra	M	OR222	San Diego Safari Park, SD	August, 1977	Spleen
<i>Equus hemionus kulan</i>	Kulan	M	OR772	San Diego Safari Park, SD	--	--
<i>Equus hemionus onager</i>	Onager	F	OR511	San Diego Safari Park, SD	September, 1985	--
<i>Equus kiang</i>	Kiang	M	KB5908	San Diego Safari Park, SD	October, 1986	Skin biopsy
<i>Equus przewalskii</i>	Przewalski's wild horse	M	OR758	San Diego Safari Park, SD	--	--
<i>Equus przewalskii</i>	Przewalski's wild horse	F	OR301	San Diego Safari Park, SD	June, 1987	Spleen
<i>Equus burchelli</i>	Burchell's zebra	F	Kristina	--	--	--
<i>Equus zebra</i>	Mountain zebra	F	Tamara	--	--	--
<i>Equus zebra</i>	Mountain zebra	M	Solo	Canyon Colorado Equine Sanctuary, CO	November, 1989	Blood
Hybrids						
<i>E. asinus</i> x Mule	Mule offspring	M	KB6221	Imperial Ranch, NE	March, 1988	Skin biopsy
<i>E. asinus</i> x <i>E. caballus</i>	Mule	F	KB5099	Imperial Ranch, NE	March, 1988	Skin biopsy
<i>E. asinus</i> x Mule	Mule offspring	M	KB5100	Imperial Ranch, NE	March, 1988	Skin biopsy
<i>E. h. kulan</i> x <i>E. kiang</i>		M	KB7447	Moscow Zoo, Russia	August, 1991	--
<i>E. przewalskii</i> x <i>E. caballus</i>		M	KB7903	Askania-nova, Ukraine	October, 1991	Skin biopsy
<i>E. grevyi</i> x <i>E. caballus</i>	Zorse	F	1419	--	April, 1977	Blood
<i>E. h. kulan</i> x <i>E. asinus</i>		F	2823	--	April, 1979	Blood

KB and OR= San Diego Zoo species ID number

* Location when animal was sampled: SD= San Diego, NE= Nebraska, CO= Colorado