

(a)

		ELA serotype		
		+	-	Σ^a
msat ^b haplotype	+	a	c	a+c
	-	b	d	b+d
	Σ	a+b	c+d	n

(b)

		ELA-A1					ELA-A2					ELA-A3		
		+	-	Σ			+	-	Σ			+	-	Σ
msat A1	+	51	2	53	msat A2	+	29	2	31	msat A3	+	58	3	61
	-	5	376	381		-	7	396	403		-	4	369	373
	Σ	56	378	434		Σ	36	398	434		Σ	62	372	434
r^c	=	0.93			r	=	0.86			r	=	0.93		
		ELA-A4					ELA-A5					ELA-A6		
		+	-	Σ			+	-	Σ			+	-	Σ
msat A4	+	17	0	17	msat A5	+	31	4	35	msat A6	+	14	1	15
	-	3	414	417		-	4	395	399		-	8	411	419
	Σ	20	414	434		Σ	35	399	434		Σ	22	412	434
r	=	0.92			r	=	0.88			r	=	0.76		
		ELA-A7					ELA-A8					ELA-A9		
		+	-	Σ			+	-	Σ			+	-	Σ
msat A7	+	10	1	11	msat A8	+	18	0	18	msat A9	+	7	0	7
	-	3	420	423		-	2	414	416		-	1	148	149
	Σ	13	421	434		Σ	20	414	434		Σ	8	148	156
r	=	0.83			r	=	0.95			r	=	0.93		
		ELA-A10					ELA-A15					ELA-A19		
		+	-	Σ			+	-	Σ			+	-	Σ
msat A10	+	75	6	81	msat A15	+	4	3	7	msat A19	+	8	0	8
	-	13	340	353		-	0	427	427		-	6	420	426
	Σ	88	346	434		Σ	4	430	434		Σ	14	420	434
r	=	0.86			r	=	0.75			r	=	0.75		

Figure S3. 2x2 contingency tables for correlation coefficient (r) analysis in 218 serotyped and microsatellite (msat) typed horses: (a) design of 2x2 contingency tables (b) microsatellite haplotypes and all pooled statistics. All haplotypes showed strong correlation ($r > 0.7$), validating the utility of intra-MHC microsatellite typing in the horse.

^a Σ = total.

^b microsatellite.

^c $r = (ad - bc) / \sqrt{(a+b)(c+d)(a+c)(b+d)}$ (Klein 1986).

References

Klein J. (1986) The Antibody. In: *Natural History of the Major Histocompatibility Complex*. (ed. by Anonymous), pp. 233-90. John Wiley & Sons, Inc., New York, NY.

