

Table S7A. Concordance of MouseDivGeno and 1000 Genomes Project sequencing calls for 54 SNPs.

MouseDivGeno	1000 Genomes				Total
	AA	BB	AB	Low Coverage	
AA	2,800	2	187	65	3,054
BB	150	3,540	105	40	3,835
AB	49	47	2,037	28	2,161
V	74	91	10	3	178
Total	3,073	3,680	2,339	136	9,228

Table S7B. Details of discordant calls.

	SNPs	%	Cases	%
Total	54		9435	
Concordant, No Off-target SNPs	54	100.0%	8266	87.6%
Discordant, No Off-target SNPs	44	81.5%	220	2.3%
Coverage between 0 and 1 SD less than mean			97	1.0%
Coverage more than 1 SD less than mean			64	0.7%
Coverage >= mean			59	0.6%
Called ABH, observed AA or BB			21	
Called AA or BB, observed AB			27	
Called V, observed AA or BB			6	
Called V, observed AB			4	
Called AA or BB, observed opposite allele			1	
Concordant, Off-target SNPs	35	64.8%	161	1.7%
Discordant, Off-target SNPs	36	66.7%	788	8.4%
Concordant target genotype call			506	5.4%
Called AA or BB, observed opposite allele and off-target Het SNP			276	2.9%
Other			6	0.1%

Table S7C. MouseDivGeno VINO calling rate.

MouseDivGeno Call	CEU	CHB/JPT	YRI
Concordant VINO Calls	31	53	82
Off-Target SNPs	202	289	482
VINO Call Rate	15.3%	18.3%	17.0%