

Supplemental Table 1. Allelic effects of the two major QTLs on survival time in combined backcross groups.

Backcross population		QTL Genotype					
		<i>D1Mit303 (Shali1)</i>			<i>D4Mit308 (Shali2)</i>		
		BB	H	SS	BB	H	SS
Group B (crosses 2, 4, 5, 7)	Median (h)	120	126	-	128	114	-
	(25 th , 75 th)	(106, 137)	(112, 137)	-	(113, 144)	(105, 137)	-
	n	226	228	-	231	221	-
Group B males	Median (h)	122	129	-	129	119	-
	(25 th , 75 th)	(112, 137)	(113, 144)	-	(114, 144)	(106, 137)	-
	n	122	118	-	127	112	-
Group B females	Median (h)	114	122	-	127	114	-
	(25 th , 75 th)	(103, 137)	(107, 137)	-	(112.5, 145)	(102, 129)	-
	n	104	110	-	104	109	-
Group S (crosses 3, 8, 9, 10)	Median (h)	-	120	136	-	129	126
	(25 th , 75 th)	-	(98, 148)	(112, 161)	-	(105, 161)	(100, 150)
	n	-	241	238	-	246	222
Group S males	Median (h)	-	123	136	-	136	126
	(25 th , 75 th)	-	(99.5, 154)	(111, 172)	-	(104, 171)	(102, 153)
	n	-	124	130	-	136	111
Group S females	Median (h)	-	113	136	-	127	124
	(25 th , 75 th)	-	(95, 139)	(112, 161)	-	(106, 154)	(98, 147)
	n	-	117	108	-	110	111
B dam (crosses 4, 5)	Median (h)	114	121	-	123	114	-
	(25 th , 75 th)	(105, 137)	(107, 135)	-	(113, 137)	(100, 130)	-
	n	128	130	-	134	123	-
B sire (crosses 2, 7)	Median (h)	124	137	-	137	120	-
	(25 th , 75 th)	(112, 143)	(113, 152)	-	(114, 152)	(106, 137)	-
	n	98	98	-	97	98	-
S dam (crosses 9, 10)	Median (h)	-	136	142	-	143	136
	(25 th , 75 th)	-	(101, 162)	(115, 196)	-	(113, 196)	(105, 162)
	n	-	110	106	-	115	98
S sire (crosses 3, 8)	Median (h)	-	112	127	-	120	119
	(25 th , 75 th)	-	(90, 137)	(105.5, 149)	-	(102, 137)	(100, 144)
	n	-	131	132	-	131	124

Crosses (**B** = C57BL/6J mice; **S** = 129X/SvJ mice; **H** = BS or SB):

2 = BSxB; 3 = BSxS; 4 = BxB; 5 = BxB; 7 = SBxB; 8 = SBxS; 9 = SxB; 10 = SxB

Supplemental Table 2. MSTs for combined *Shali1* (*D1Mit303*) and *Shali2* (*D4Mit308*) genotypes within backcross populations.

Backcross population		2-QTL Genotype (<i>D1Mit303</i> – <i>D4Mit308</i>)						
		BB-BB*	BB-H	H-BB	H-H	H-SS	SS-H	SS-SS
Total	Median (h)	126	113	129	123	113	137	134.5
	(25 th , 75 th)	(113, 138)	(102, 129)	(113, 146)	(105.5, 138)	(93.5, 145.8)	(112, 176)	(111.8, 154)
	n	115	109	115	235	114	122	108
Females	Median (h)	126	113	127	114	112	135	137
	(25 th , 75 th)	(113, 138)	(90, 125.5)	(112, 145.5)	(102.5, 137)	(89, 138)	(112, 162)	(110.5, 151.5)
	n	53	51	51	115	59	53	52
Males	Median (h)	127.5	113	130	124.5	123	137	128
	(25 th , 75 th)	(114, 138)	(104.3, 136)	(114, 147.8)	(111, 146)	(95.5, 149)	(103, 184)	(111.8, 156.3)
	n	62	58	64	120	55	69	56
Group B (crosses 2, 4, 5, 7)	Median (h)	126	113	129	121	-	-	-
	(25 th , 75 th)	(113, 138)	(102, 129)	(113, 146)	(107, 137)	-	-	-
	n	115	109	115	111	-	-	-
Group S (crosses 3, 8, 9, 10)	Median (h)	-	-	-	123	113	137	134.5
	(25 th , 75 th)	-	-	-	(101.8, 152.3)	(93.5, 145.8)	(112, 176)	(111.8, 154)
	n	-	-	-	124	114	122	108

* **B**=C57BL/6J allele; **S**=129X/SvJ allele; **H**=BS or SB alleles