

	Parameter											
	ALP (U/L)	ALT (U/L)	AST (U/L)	CPK (U/L)	Albumin (g/L)	BUN ( $\mu$ M)	Creatinine ( $\mu$ M)	Glucose (mM)	Phosphorus (mM)	Chloride (mM)	Sodium (mM)	Triglycerides (mM)
+/+ average	86.5	21.5	56.5	145.38	3.14	17.88	0.138	252	7.0875	102.125	19.13	150.6
-/- average	92.5	25.1	66.9	207.25	3.04	18.25	0.125	245	7.0125	102.875	18.65	163.1
Average pairwise change (%)	-6.9%	-16.9%	-18.4%	-42.6%	3.2%	-2.1%	9.1%	2.9%	1.1%	-0.7%	-0.25%	13.35%
p-value	0.560	0.107	0.442	0.512	0.200	0.825	0.351	0.723	0.825	0.265	0.351	0.082

**Supplemental Table S1. Changes in clinical chemistry in adult *Anp32b*<sup>-/-</sup> mice.** Indicated parameters demonstrated statistically significant changes between adult paired +/+ and -/- mice (n=8). Statistical p-value determined by paired Student t-test. *ALP*, Alkaline Phosphatase; *ALT*, Alanine Aminotransferase; *AST*, Aspartate Aminotransferase; *CPK*, Creatine Phosphokinase; *BUN*, Blood Urea Nitrogen.

A/ Balb/c-congenic *Anp32b*<sup>-/-</sup> acquisition against time

Litters	<i>Anp32b</i> genotype obtained			Proportion of <i>Anp32b</i> <sup>-/-</sup>
	+/+	+/-	-/-	
1 to 10	11	32	10	18.8%
11 to 20	20	27	8	14.5%
21 to 30	19	32	11	17.7%
31 to 40	19	27	7	13.2%
41 to 50	17	36	8	13.1%
51 to 60	16	27	6	12.2%

B/ Balb/c-congenic *Anp32b*<sup>-/-</sup> acquisition against dam age

age of dam (weeks)	<i>Anp32b</i> genotype obtained			Proportion of <i>Anp32b</i> <sup>-/-</sup>
	+/+	+/-	-/-	
<15	33	45	16	17.0%
15-21	19	51	16	18.6%
22-28	40	55	12	11.2%
29+	10	30	6	13.0%

**Supplemental Table S2. Failed hypothesis tests for variable *Anp32b*<sup>-/-</sup> acquisition in the six-generation Balb/c congenic background.**

A/

	Mouse 1	Mouse 2	Mouse 3	Mouse 4
Retained non-linked somatic SNPs	20	4	12	6
Total non-linked somatic SNPs analysed	1270	1270	1270	1270
p (retained B6)	0.0157	0.0032	0.0094	0.0047
p (congenic Balbc)	0.9843	0.9968	0.9906	0.9953

B/

SNP	Chromosome	Retained on Mouse #	Calculated Probability
rs3707642	1	1	$0.0157 \times 0.9968 \times 0.9906 \times 0.9953 = 0.0154$
rs3710548	3	2, 4	$0.9843 \times 0.0032 \times 0.9906 \times 0.0047 = 1.46 \times 10^{-5}$
rs6190775	11	1,2,4	$0.0157 \times 0.0032 \times 0.9906 \times 0.0047 = 2.32 \times 10^{-7} **$
rs13482738	15	1,3	$0.0157 \times 0.9968 \times 0.0094 \times 0.9953 = 1.48 \times 10^{-4}$
rs3686467	19	1,3	$0.0157 \times 0.9968 \times 0.0094 \times 0.9953 = 1.48 \times 10^{-4}$

**Supplemental Table S3. Calculation of probability of retention of non-linked somatic SNPs.** A. Calculation of C57BL/6J SNPs retention rates in mice of the six-generation Balb/c-congenic colony. B. Representative calculation of SNP retention probability from the five somatic chromosomes that were identified as carrying some C57BL/6J SNPs. X-chromosome had no C57BL/6 SNP retention but was excluded from analysis based on complex segregation. \*\*, Very high statistical significance is determined using Bonferroni adjustment of  $p < 0.001$ , i.e.  $0.001/1270 = 7.87 \times 10^{-7}$

Chromosome 11 nucleotide location	Gene	Substitution	SNP Identifier	Present in Sanger Database	Present in Leo et al. colony	Location in Gene	Predicted effect
5867697	<i>Aebp1</i>	C to T	N/A	No	Yes	Coding sequence	Missense mutation S394F
7063524	<i>Adcy1</i>	G to C	rs212110788	Yes	No	5' UTR	unknown

**Supplemental Table S4. Deviations from reported Balb/c polymorphisms against reference C57BL/6 sequence in region surrounding rs6190775.** *N/A*, not available; *5'UTR*, 5' untranslated region