

SUPPLEMENTAL MATERIAL

Nuvolone et al., <http://www.jem.org/cgi/content/full/jem.20131274/DC1>

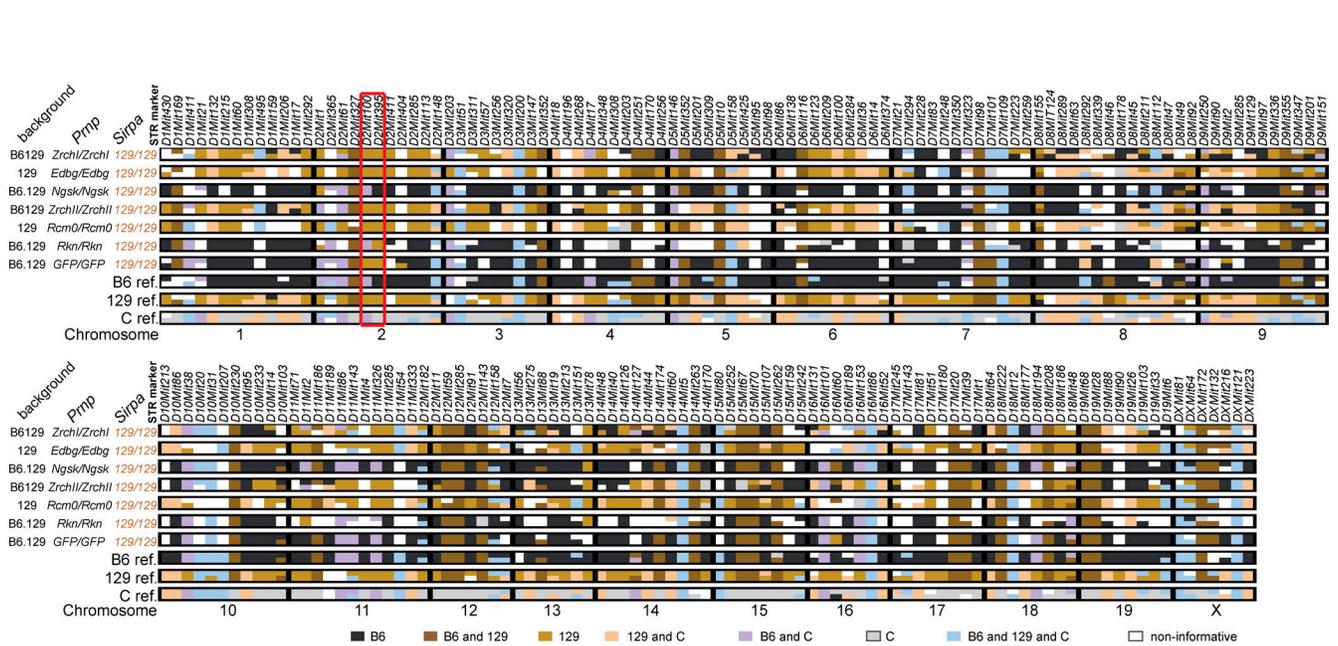


Figure S1. Whole-genome STR analysis of the seven *Prnp*^{-/-} lines analyzed in this study. The red border marks the region on Chr 2 containing *Prnp* and *Sirpa*. For each line, a representative mouse is shown. For heterozygous markers, the strain-defining color is arbitrary and not intended to designate a specific haplotype. Data show representative mice of at least three animals analyzed per group, except for *Prnp*^{Rcm0/Rcm0} and *Prnp*^{Rkn/Rkn}, for which one mouse was analyzed.

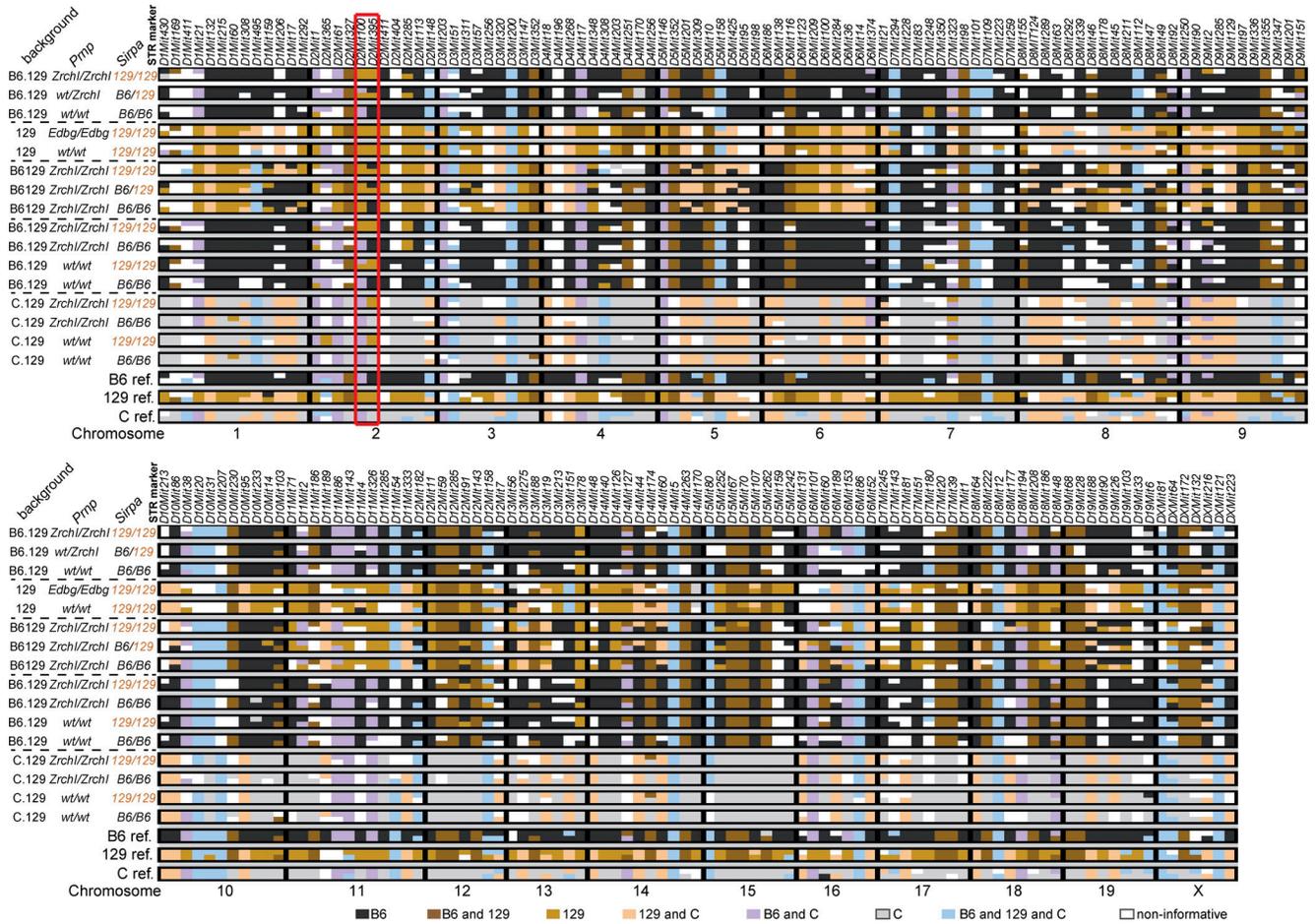


Figure S2. Whole-genome STR analysis of *Prnp*^{Zrchl/Zrchl}, *Prnp*^{Edbg/Edbg}, and control mice. The red box denotes the region on Chr 2 containing *Prnp* and *Sirpa*. Each line represents one mouse of strain shown at left. For heterozygous markers, the strain-defining color is arbitrary and not intended to designate a specific haplotype. Reference B6, 129, and C samples and 129-*Prnp*^{Edbg/Edbg} are the same as in Fig. S1. Data show representative mice of at least three animals analyzed per group.

Table S1, included as a separate PDF file, shows a list of 305 differentially expressed genes identified by RNA-Seq ($P < 0.05$), sorted by Log_2 fold change.

Table S2, included as a separate PDF file, shows genes containing nonsynonymous SNPs between B6.129-*Prnp*^{wt/wt} and B6.129-*Prnp*^{Zrch1/Zrch1} pMΦs sorted by chromosome location.

Table S3. Overview of allelotypes of the four candidate genes on Chr 2 linked to *Prnp* (*Sirpa*, *Mertk*, *Tyro3*, and *Thbs1*) in five *Prnp*-KO strains and congenic B6.129 mice with different combinations of *Prnp* and *Sirpa* alleles

Strain	<i>Prnp</i>	<i>Sirpa</i>	<i>Mertk</i>	<i>Tyro3</i>	<i>Thbs1</i>
	chr2:131,909,927- 131,938,431	chr2:129,592,838- 129,632,228	chr2:128,698,996- 128,802,188	chr2:119,799,513- 119,818,103	chr2:118,111,921- 118,127,133
<i>Prnp</i> ^{Zrch1/Zrch1}	KO	129/129	129/129	129/129	129/129
<i>Prnp</i> ^{Ngsk/Ngsk}	KO	129/129	129/129	B6/B6	B6/B6
<i>Prnp</i> ^{Edbg/Edbg}	KO	129/129	129/129	129/129	129/129
<i>Prnp</i> ^{GFP/GFP}	KO	129/129	129/129	129/129	129/129
<i>Prnp</i> ^{Zrch1/Zrch1}	KO	129/129	129/129	129/129	129/129
B6.129- <i>Prnp</i> ^{Zrch1/Zrch1} <i>Sirpa</i> ^{129/129}	KO	129/129	129/129	129/129	129/129
B6.129- <i>Prnp</i> ^{Zrch1/Zrch1} <i>Sirpa</i> ^{B6/B6}	KO	B6/B6	B6/B6	B6/B6	B6/B6
B6.129- <i>Prnp</i> ^{wt/wt} <i>Sirpa</i> ^{129/129}	WT	129/129	129/129	129/129	129/129
B6.129- <i>Prnp</i> ^{wt/wt} <i>Sirpa</i> ^{B6/B6}	WT	B6/B6	B6/B6	B6/B6	B6/B6

Table S4. Primer sequences and restriction enzymes for RFLP analysis

Name/marker ID	Forward primer/primer 1	Reverse primer/primer 2	Restriction enzyme
For RFLP analysis of <i>Sirpa</i>			
RFLP <i>Sirpa</i> B6vs129	5'-CCGTTCTGAACTGCACCTTTG-3'	5'-GGGGTGACATTAAGTACGACGG-3'	AvaI
RFLP <i>Sirpa</i> Cvs129	5'-ACAGAGGAGTAGGGCAAAGC-3'	5'-TAGGTACCGGCATCTTCTGG-3'	XmnI
For RFLP analysis of <i>Tyro3</i>			
RFLP <i>Tyro3</i> B6vs129	5'-GGGATTAAGGATCCGGCCC-3'	5'-CACCTTCGACAGTGAGCCAT-3'	HpyCH4III
For RFLP analysis of <i>Thbs1</i>			
RFLP <i>Thbs1</i> B6vs129	5'-CTTGGGGAAACTCCACACT-3'	5'-AAATCTTCCAGCCGATGTG-3'	BseRI
For <i>Mertk</i> sequencing			
<i>Mertk</i>	5'-TGGTCTGCAGTAAGCCCTTG-3'	5'-AAGGTAAGCTCGATGGCTCG-3'	
For <i>Sirpa</i> ORF sequencing			
<i>Sirpa-1</i>	5'-AGTCCACCTTAAGAGGACCAAGTAGC-3'	5'-TGTACAGAAACAGGACGCGGA-3'	
<i>Sirpa-2</i>	5'-TCTCCCTCCTTGCTCTGCAG-3'	5'-TACCTCGCAGATGACCTTAGAATTAA-3'	
<i>Sirpa-3</i>	5'-CCTAGTGGAAAGAATGTCTCCTACAACA-3'	5'-CATATTCTGTGTGGTTGTTAGGCTCA-3'	
<i>Sirpa-4</i>	5'-CCAGGTACAGTCTTTGATCCAGGA-3'	5'-CCAGGGAGTCTCTGCTGGTCTA-3'	
<i>Sirpa-5</i>	5'-ACCCAGGTTGCGTCCTTGA-3'	5'-GTGGGTGGTTGCGCTGGCT-3'	
<i>Sirpa-6</i>	5'-CCAATGCTGACCTAATGTTGGC-3'	5'-CATCTATACCCCGTGTGTATACACA-3'	
<i>Sirpa-7</i>	5'-AACTGTCTTTGTCCGGCC-3'	5'-GGCACAGTTCATCCTCACCC-3'	
For high-resolution microsatellite genotyping on Chr 2			
D2Jyh582	5'-ACTAAGCCCAACACAGCCTT-3'	5'-GCCTACCATATGCAAGACCC-3'	
D2Jyh1192	5'-TCTCTTTGACTTTTACACATGC-3'	5'-CCCTGTGAGTGACAGAGGTATC-3'	
D2Gul161	5'-GTGGCTCTTTCTCCTGTTCC-3'	5'-GTATGCATGTATGTTTATGTGTGGT-3'	
D2Gul169	5'-TGCCTGAAGCTAACTACAGTGTAC-3'	5'-CATCATCATTATCAGAAGCATGTT-3'	
D2Ngul1543	5'-GATGTACAGAGGGCACTGCA-3'	5'-AGTCACCTATGTTGGATGTACCAC-3'	
D2Ngul1586	5'-ATGGGCTGATGATGTACA-3'	5'-AGGTCCACATCCATACAGCA-3'	
D2Gul289	5'-GGGAACTGACTTAGATCCTAAAAGT-3'	5'-CTGGCACACAACCC-3'	
D2Ngul1677	5'-ACCTCAAAGCAGAATCCTC-3'	5'-TCCACACTCTAAAGGGATCAAG-3'	
D2Ngul1686	5'-CTCGAGAGTACATACGCATGC-3'	5'-AGCAAGACACCTGATAGTACGTG-3'	
D2Ngul1761	5'-TGTGGAGCAGGTGACGTC-3'	5'-AGCCTCACCTCATGAAAGCT-3'	
D2Ngul1797	5'-TTTCCCCAAAACCAGCAT-3'	5'-GATTTCTTTCCATTCCCCAA-3'	
D2Ngul1816	5'-ACTGTTGTGGCCAAAATGG-3'	5'-CCTGCACAGTCTTTGTTGTTG-3'	
D2Ngul1849	5'-AGGTGAAGGTTATTTCTGGAC-3'	5'-CCAGGACAGCTTCTAGTAGTGTCT-3'	
D2Ngul1865	5'-TTAAACAGGAATCTTTCAACATTT-3'	5'-ATAAGCTGTGCTCTGGCCTT-3'	
D2Ngul1888	5'-ACCACTTCGATATCATTGGGA-3'	5'-GCCCTGCAAACACTAAATCA-3'	
D2Ngul1937	5'-GCTCATGTCCTTCCAAGAATG-3'	5'-GGGAAGAAGAGGAAGGAATTG-3'	
D2Jyh2400	5'-GCAATACCTCCAGCAATTTGT-3'	5'-CCATCCTACAAAAGTAATCCA-3'	
D2Jyh2407	5'-CAGTGAGACCTGTCTCAAAA-3'	5'-CTGCCTTCTAGAGCTGTCTT-3'	
D2Gul374	5'-ATGACTTAAGCATTTTAAAGCCAAA-3'	5'-CCCCCAACTTTAAACACA-3'	
D2Gul399	5'-CAGCAGGTAAGAGCCCTTG-3'	5'-TGAAATATTTTTGTCTTTTTTTGT-3'	
D2Gul498	5'-GACCCTGCAGATCTCAGCA-3'	5'-CATTTTTCTAATCATTTATGCTTATGTG-3'	