# Additional File

# Supplementary Table 1

### List of PCR primers and sequence primers in SNP analysis

Gene	Forward Primer	Reverse Primer	Sequence Primer
AlyRef2	GTGTCAGATGCTGACATTCAG	ATTGTCTGCACAGTCCAGTTG	TACGATCGCTCTGGACGAAG
Apcs	GCCAATCTCTGCTACATGAG	GCCAATCTCTGCTACATGAG	GAGCCAAGAGAAAGCGTTTG
Atf6	CAAGTGGGCCTGGATTCTGCAACAG	GCTTACTTCGCGAGTGCGGCATAAG	GAGCGTTGACTTACCAATAG
Casq	ACCATCAGAGTCTGGGGGAG	ACAGACAGGAAGCAGGGAG	TGTGTGTGTGGGCAGGTCCAG
Cd48	TGGAGGTGGCTGGAGATAG	TACTTCCCCACCTCCCCAG	CCCAGGTCCCGTTTCTCTTG
Cd84	TTTCCCATTGGCTCGAGGAG	CTGGAACTGATGGGAATGAG	CAAGTTCCCTTGGCTCCTAG
Fcerla	ATAAGGACTCTGCTGTGGAG	CTCATCTCCATCTGTTTCAG	GTTAATGGTCATTCATGGATG
Fcer1g	CTGTGTTCTCAGGAGCTGAG	GATACTCCCTGGGTAGGAAG	CCAAGCTCCACCAGCATGTG
Fcgr3	CCTCTCCCACGCAAGACTACACAGAG	CCACCACTGCCCAGTACAGTCAG	TGATGCTTCCCAGAAACCAG
Fcrg4	AGAGTTTGAGGCCAGCCTGGTCTATAAAG	CTCTTGCTGCCAATCCTAACCACCTTAG	TAAAGTTCTAGGACAGCCAGGG
Fcrla	GAGCCCTCTCGGTAGAAGATAACCTGAG	GAGGTTTGGTGTCTTCTTCTTCTCTCCTGAG	ATATTCCCAGGGCAGAAGAG
Fcrlb	CCAACAACCAAAAACCACAGCAACAGGAG	TCAGTCAGTCACTTCCATCCCGAACAG	GGCTCCAATTTGCACACAAG
Ly9	CTAGCCAGTGGGCTTAGAAG	CTTGTGGCTTCCATGGCTAG	GAACAACCGCTCATCTCGAG
Mpz	GGGACATTCTTTATGCTGAGACCTTGAGCAG	CTGTTGGTTGAAGCTATTTGCCCTTCTCAG	CTGAGACCTTGAGCAGATAAAG
Nuf2	CTTGGTCTAGGGCAGAGTGTTAATACAG	GTCTCTCATGTCATTGTCCTGATTGTCCTGTAG	TGTACCTGGGCAGGGATCAG
Rgs4	GGCCTATAAAGCACATGGCAGAAGCAG	GTGGTGTTGGGGTTTTCACTAGGGTAAG	CAAATTGGGTCTTACCCTAG
Sh2d1b1	GAGCAAACATGTCCTTCCTACCTGTGAG	GGCCTTTGCACACGCTAAGCAAG GGACAGGCATGGAGATCACCCTGTTAAG	TGTGACCCAACCTGAAACTG
	Indacheereeadaendorediad	ODACAOOCATODAOATCACCCTOTTAAO	TECHAGEAAATETTTEETTC
Slamf6	GGTACTGCTCTTCTCAGTAG	ACTGCCTGAACAGTGGCAG	AGCCAGACTGCTGCTGAGAG
Slamf7	GTCTACCTCCCCAGTGCTG	TAGCTCCACCACACACAG	TGCACTTCTTAAGGGAAGAG
Slamf8	CAGCCAGGATCAGGAACAG	CAGCAGAGGGTATAACTGAG	TGTAGGAGGCCTTCCCGGAG
Slamf9	GGTTCTCTGACCTTCAGTAG	CTTGCAACTGGTTGTCCGAG	CTGCTTCTGAGACTCCAAAG

# Supplementary Table 2

Survival rate of mouse lines

Strain	Survival at 45 wk
B6 Female	17/17
B6. <i>lpr</i> Female	17/17
RIIB <sup>-/-</sup> SENDAI Female	30/30
<i>RIIB<sup>-/−</sup>SLAM</i> <sup>129</sup> Male	18/18
<i>RIIB</i> -∕-TOKYO Male	4/4
RIIB-∕-TOKYO Female	7/7
<i>RIIB<sup>-/-</sup>SLAM</i> <sup>129</sup> Female	13/14
RIIB-/-SENDAI Male	34/35
SLAM <sup>129</sup> Female	22/23
SLAM <sup>129</sup> Male	26/27
	0/0
	0/3
RIIB <sup>-/-</sup> IACONIC Male	2/3
<i>RIIB</i> -∕ <i>lpr</i> Female	0/28
<i>RIIB⁻∕−.lpr</i> Male	1/12

Data for *lpr*-harboring mice are from Yajima K et al. (*Eur J Immunol* 2003, **33**:1020–1029) for comparison.

#### Supplementary Figure 1



#### Supplementary Figure 1. Family tree of *Fcgr2b*-deficient (*RIIB*-/-) mice in our laboratory.

The original *RIIB<sup>-/-</sup>* mice constructed with a 129/B6 hybrid background [13] were backcrossed into the B6 genetic background for 12 generations (N12) as described [16]. At the 18th generation (N18), we obtained *RIIB<sup>+/+</sup>SLAM*<sup>129</sup> heterozygotes, which were intercrossed to obtain the *RIIB<sup>+/+</sup>SLAM*<sup>129</sup> line. At the 22nd (N22) generation, *RIIB<sup>-/-</sup>SLAM*<sup>B6</sup> heterozygotes obtained were intercrossed to generate the N22 *RIIB<sup>-/-</sup>* line. Further backcrossing of N22 offspring into B6 yielded heterozygotes for *RIIB<sup>-/-</sup>SLAM*<sup>129</sup> and *RIIB<sup>-/-</sup>* at the 28th generation (N28), each of which was intercrossed to generate homozygotes of N28 *RIIB<sup>-/-</sup>SLAM*<sup>129</sup> and N28 *RIIB<sup>-/-</sup>SLAM*<sup>B6</sup> (*RIIB<sup>-/-</sup>*). Our *RIIB<sup>-/-</sup>* mouse line is designated as *RIIB<sup>-/-</sup>SENDAI* where it is necessary to distinguish it from those obtained from others. We analyzed the following SSLP markers on chromosome 1: *D1Mit100*, *D1Mit102*, *D1Mit501*, *D1Mit34*, *D1Mit268*, *D1Mit105*, *D1Mit15*, *D1Mit36*, *D1Mit205*, *D1Mit270*, *D1Mit147*, *D1Mit146*, *D1Mit113*, *D1Mit355.2*, *D1Mit150*, *D1Mit221*, and *D1Mit17*.

### Supplementary Figure 2



#### Supplementary Figure 2. Estimation of the severity of glomerulonephritis.

The severity of glomerulonephritis was estimated as follows; grade 0, normal; grade 1, neutrophil infiltration and segmental mesangial proliferation; grade 2, limited lobulated glomeruli in grade 1; and grade 3, crescent formation and severe lobulated glomeruli with lymphocyte infiltration. Representative picture for each score is shown with the source of mouse line.