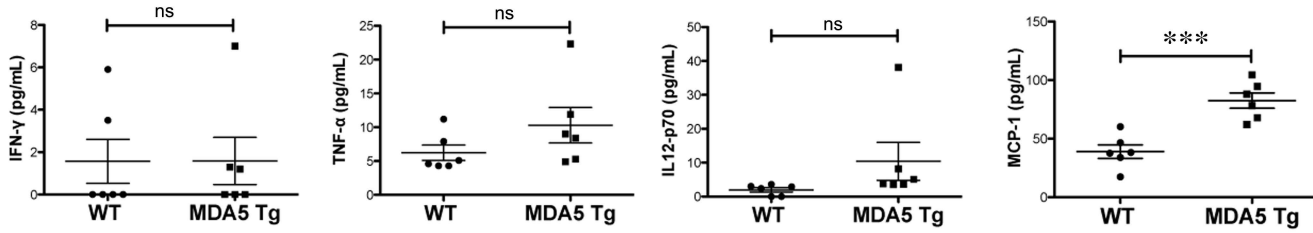
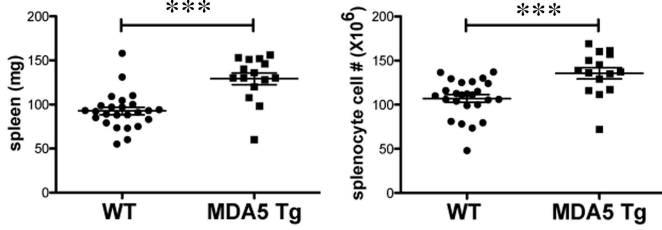


Supplementary Data

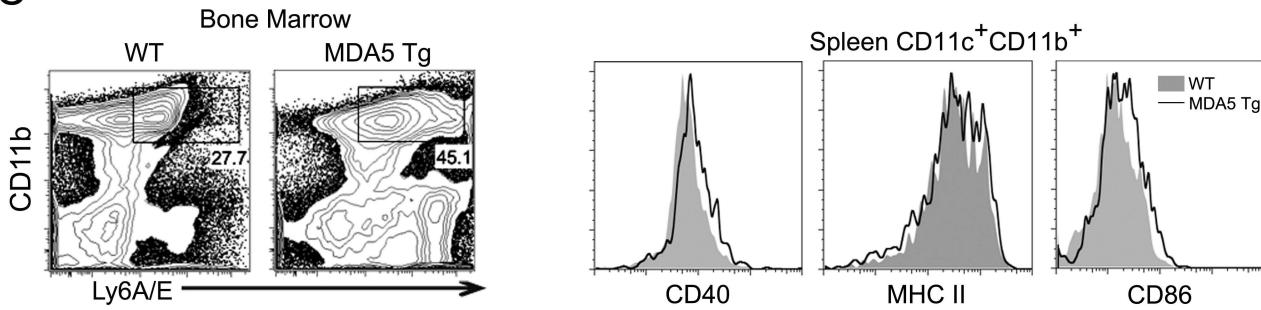
A



B



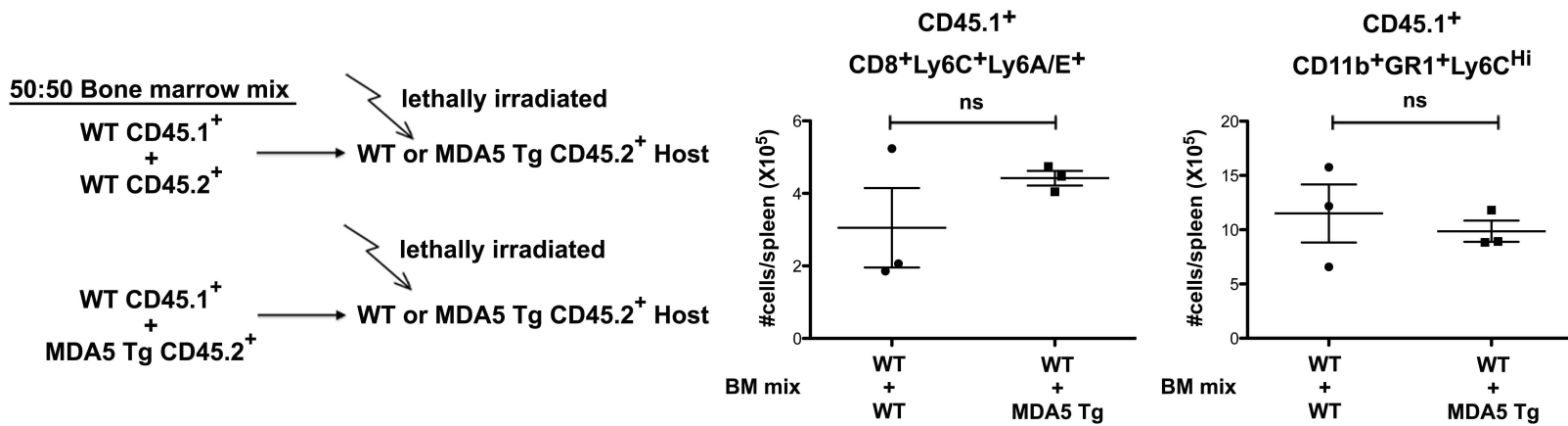
C



SUPPLEMENTAL FIGURE 1

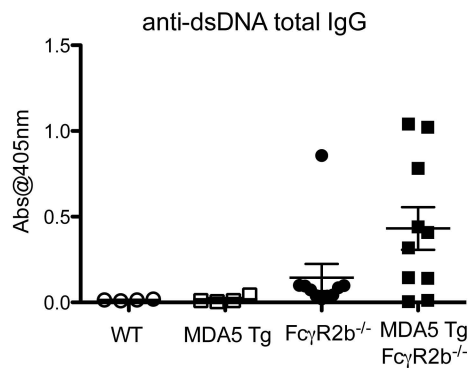
Characterization of the immune phenotype of MDA5 Tg mice. (A) MCP-1 levels elevated in MDA5 Tg mice. Serum cytokines measured using the cytokine bead array from BD Biosciences. (B) Enhanced spleen size in MDA5 Tgs. Spleens were weighed or enumerated for cellularity. (C) Signs of IFN-I exposure in bone marrow CD11b⁺ cells and no evidence of DC maturation in MDA5 Tg mice. Ly6A/E levels were measured on bone marrow CD11b⁺ cells in WT or MDA5 Tg mice (left). CD11c⁺CD11b⁺ splenocytes from WT or MDA5 Tg mice were stained for CD40, MHC class II or CD86 and analyzed using flow cytometry (right). For (A) and (B), a statistical T test was performed. ***P<0.001.

Supplementary Data



SUPPLEMENTAL FIGURE 2

IFN-I phenotype is not transferred through bone marrow-derived cells. Congenically marked CD45.1⁺/CD45.2⁺ bone marrow was mixed with either WT or MDA5 Tg CD45.2⁺/CD45.2⁺ bone marrow and transferred into lethally irradiated CD45.2⁺/CD45.2⁺ hosts. 2 months later spleens were harvested and CD45.1⁺ cells were analyzed for the MDA5 Tg phenotype.



SUPPLEMENTAL FIGURE 3

Anti-dsDNA antibody titer enhanced in MDA5 Tg FcγR2b^{-/-} mice. anti-dsDNA antibody titers were measured in the sera isolated from 3-5 month old WT, MDA5 Tg, FcγR2b^{-/-} and MDA5 Tg FcγR2b^{-/-} mice. Absorbance plotted has been background-subtracted. Each dot represents an individual mouse.

Supplementary Data

Table S1. Superarray Interferon α , β Response PCR Gene expression Array

Gene	MDA5 Tg(1)	MDA5 Tg(2)	B6.Yaa (1)	B6.Yaa (2)
Adar	1.8	2.1	1.2	1.1
Bag3	2.3	1.7	1.1	0.9
Bst2	4.0	3.1	1.3	1.4
Cd70	4.1	1.2	4.8	5.0
Cxcl10	2.6	2.2	1.5	2.1
Eif2ak2	2.4	2.4	1.1	0.8
H2-M10.2	1.5	1.8	1.4	1.0
H2-Q1	2.1	2.0	1.4	1.1
H2-T10	2.2	2.3	1.6	1.2
Ifit1	6.5	5.8	0.6	0.9
Ifit3	6.1	7.2	0.7	0.7
Irf7	6.5	6.7	1.1	1.1
Isg15	4.1	4.9	0.6	1.1
Isg20	1.6	2.1	1.0	1.1
Mx1	4.4	4.6	1.1	1.1
Oas1a	8.0	8.2	1.2	1.4
Oas1b	1.5	1.7	1.0	1.2
Oas2	19.0	13.8	1.7	1.4
Stat1	2.0	1.9	1.3	1.2
Stat2	1.6	1.4	1.0	1.0
Tap1	1.8	1.6	1.5	1.1
Tnfsf10	1.8	1.7	1.4	1.0

Expression of IFN-I target genes in purified CD43⁻ splenic B cells from MDA5 Tg or B6.Yaa mice. Values are expressed as fold change compared to WT controls.