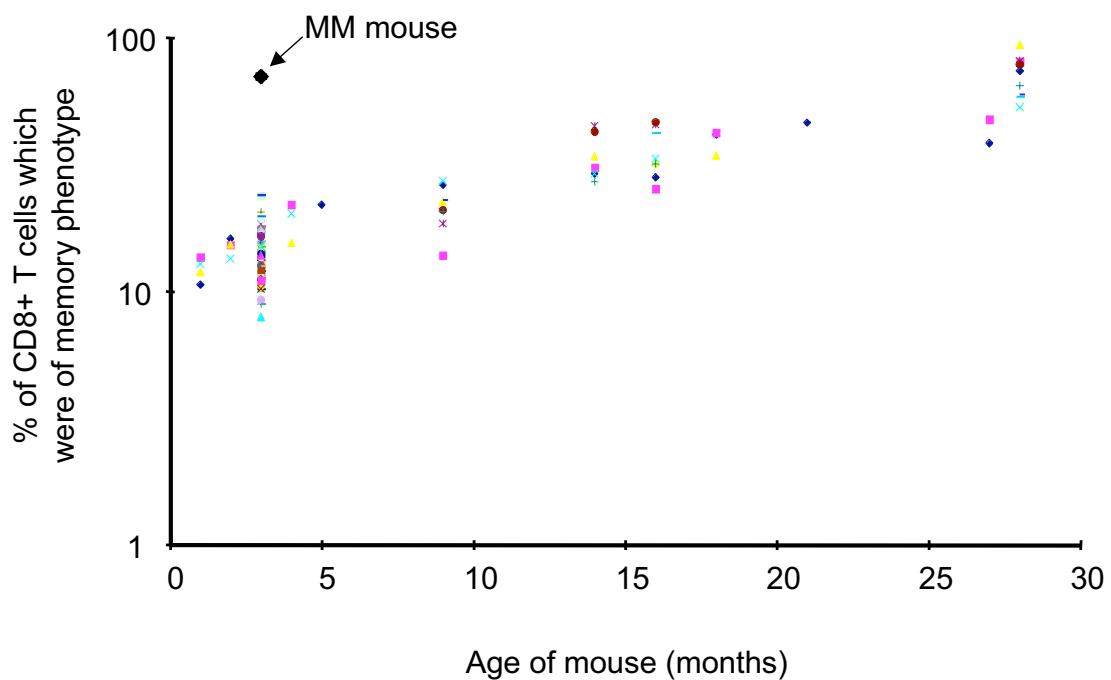


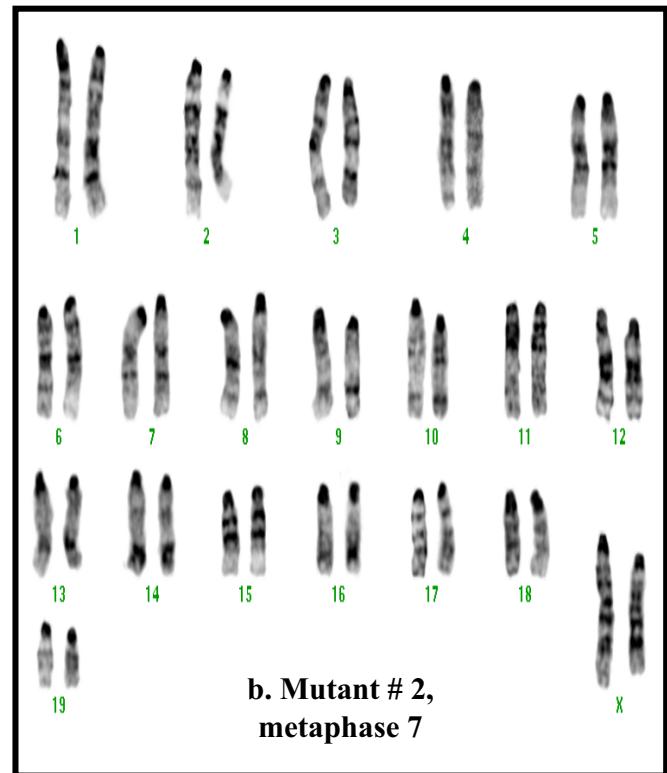
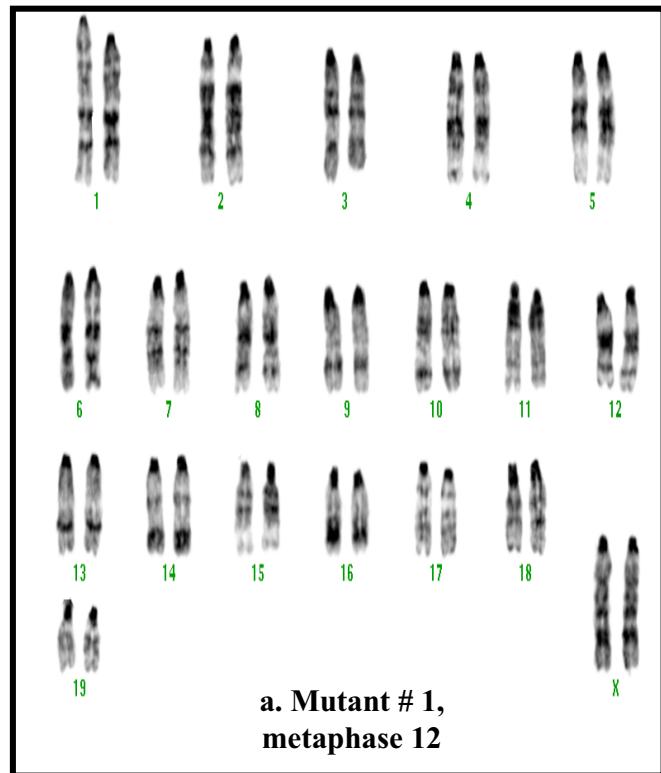


Khiong et al. Figure S1

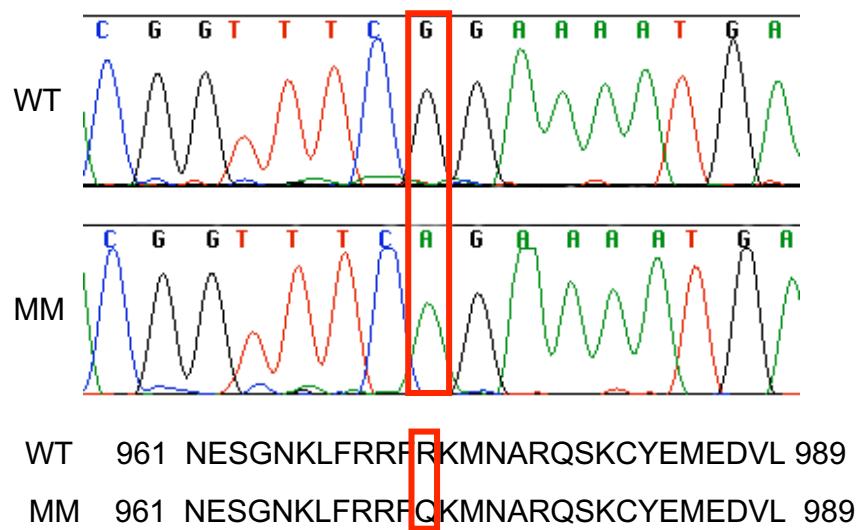




Khiong et al. Figure S2



Khiong et al. Figure S3

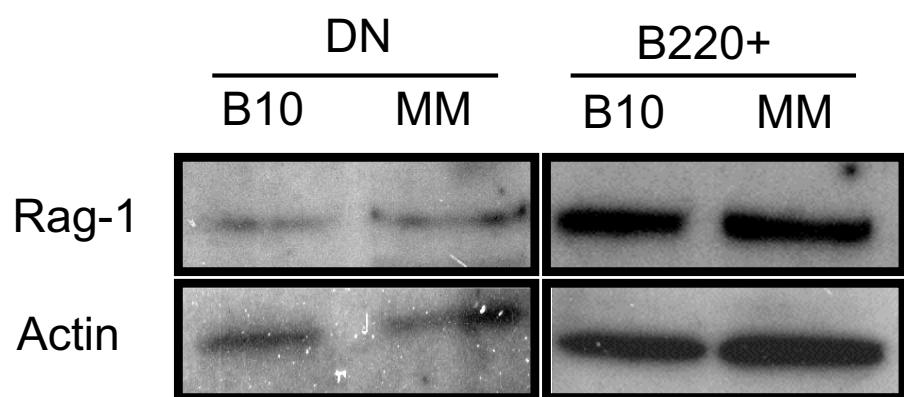




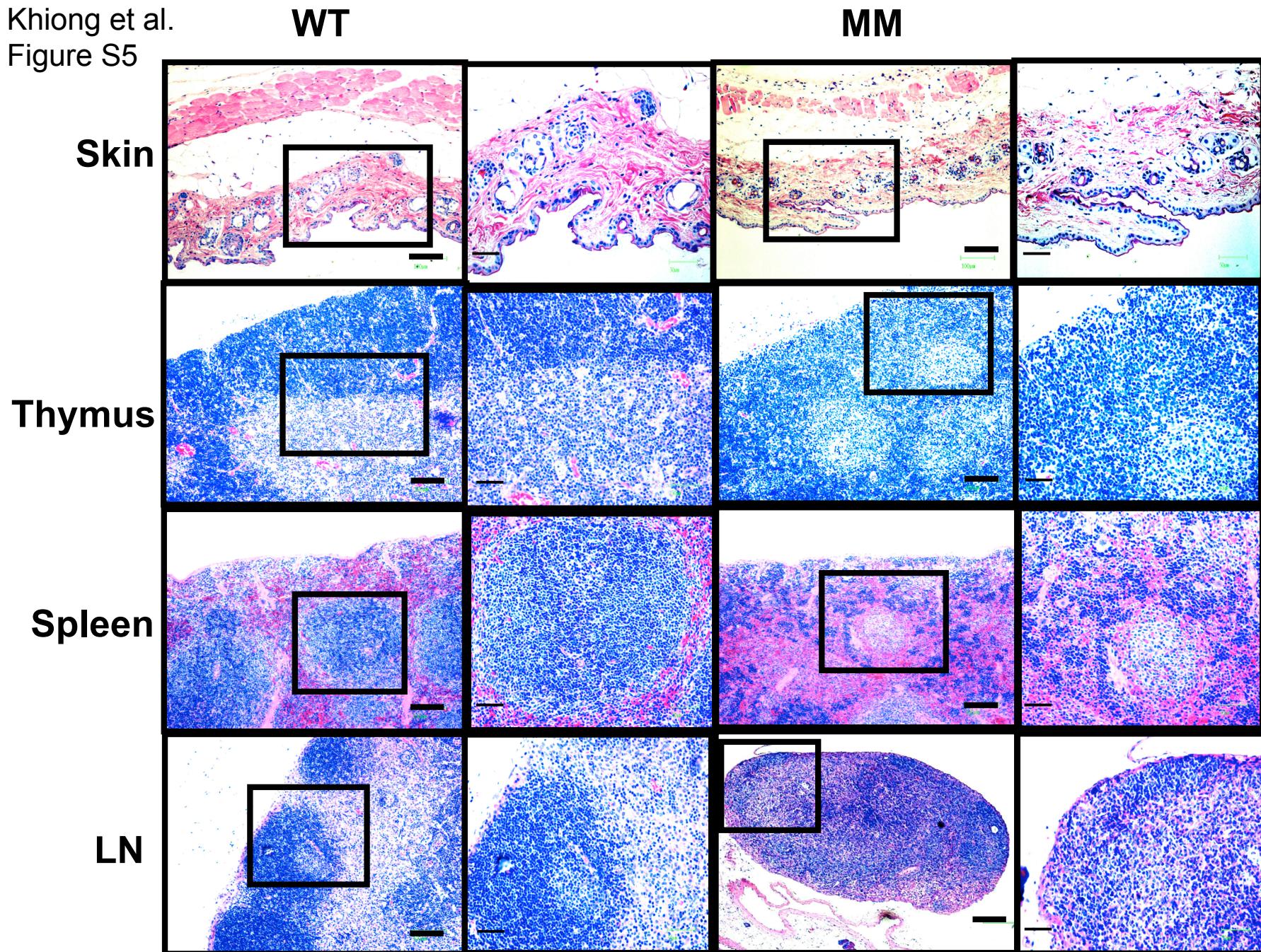
⊕

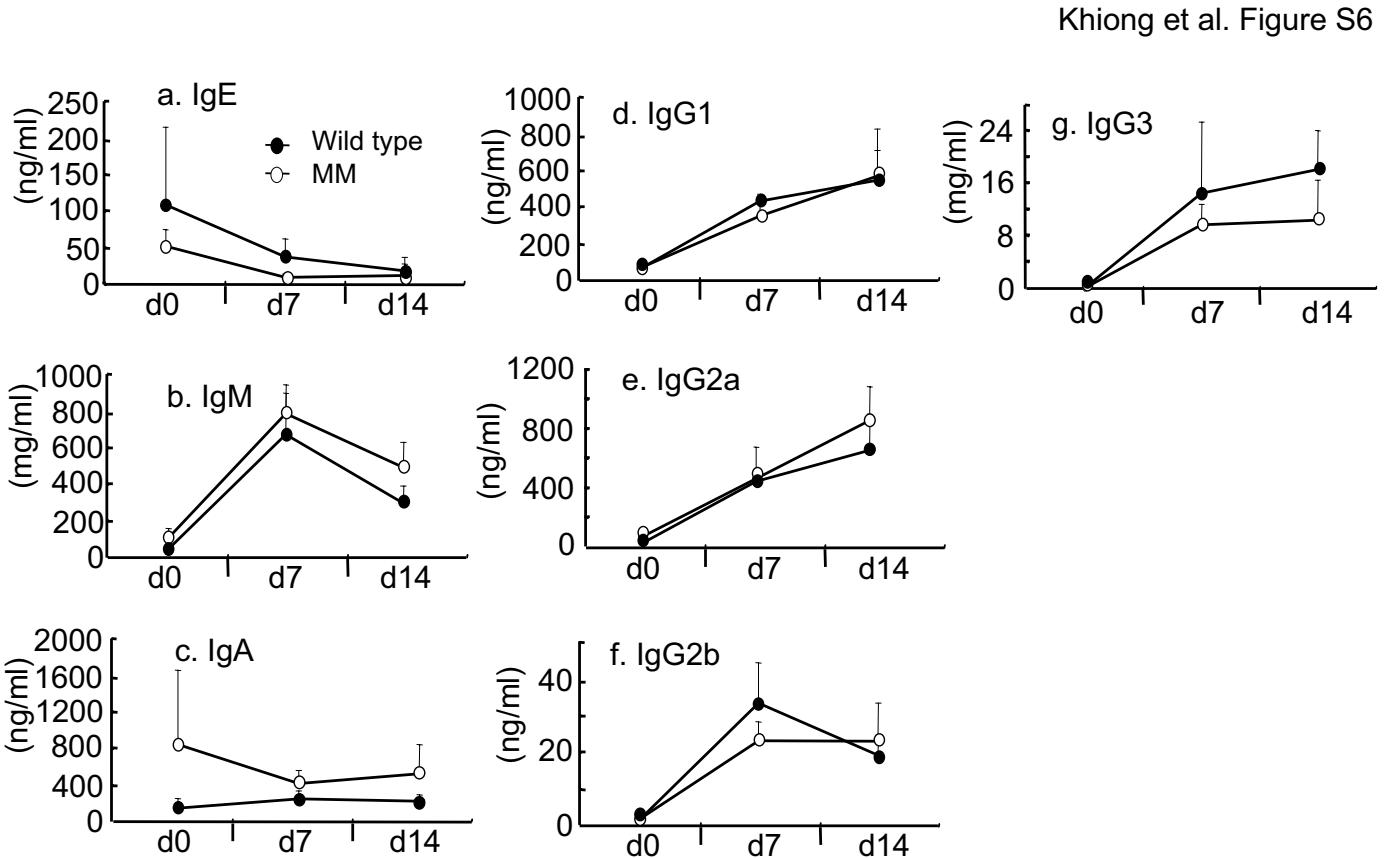


Khiong et al. Figure S4

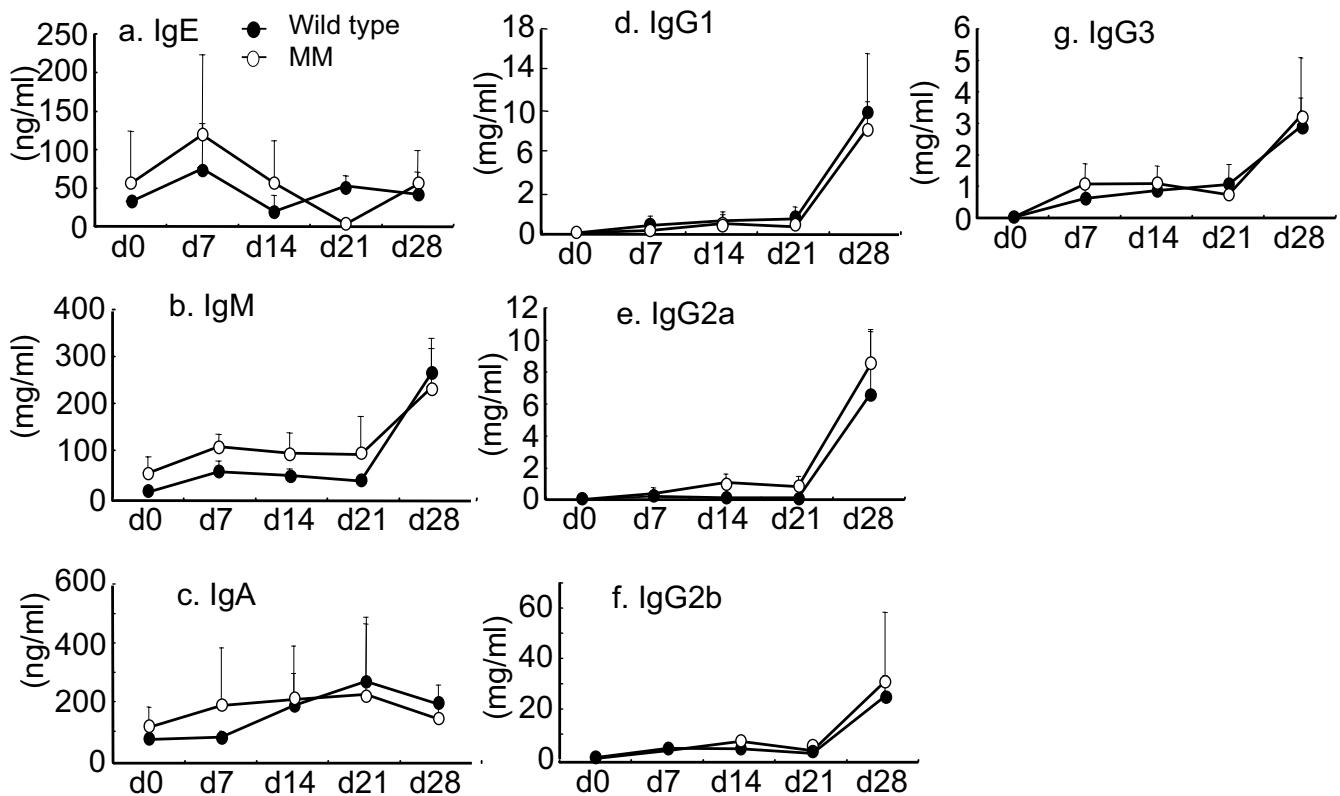


Khiong et al.
Figure S5

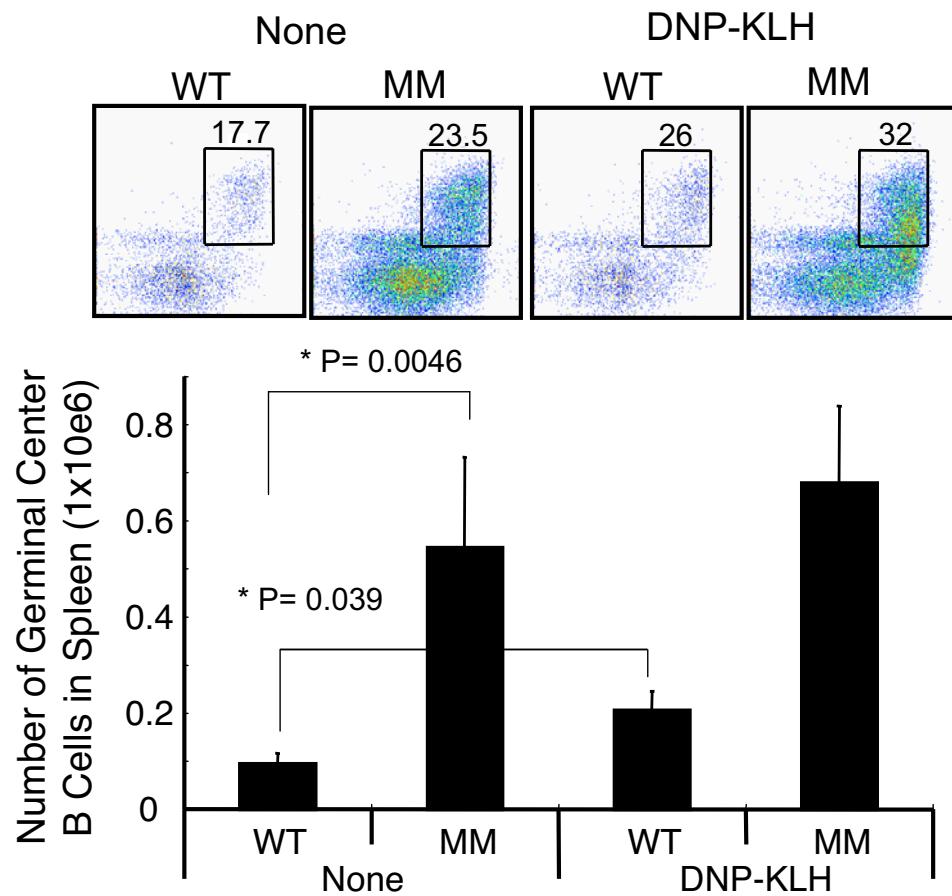


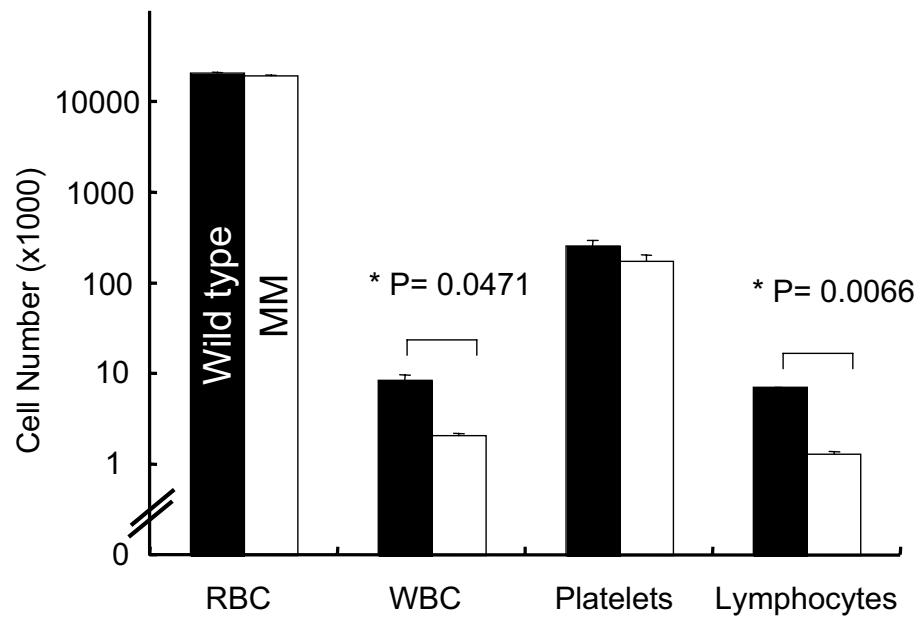


Khiong et al. Figure S7



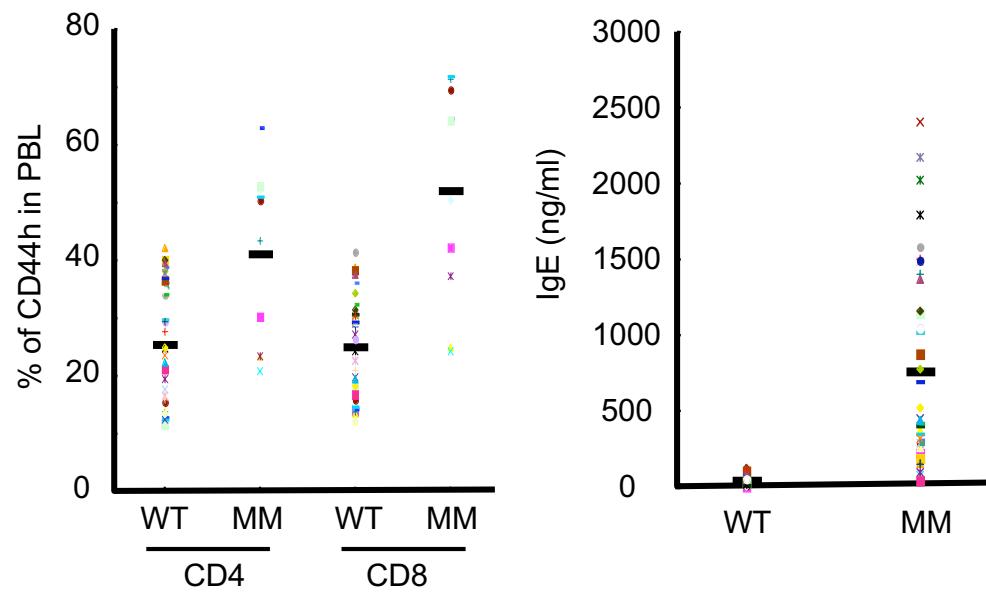
Khiong et al. Figure S8





Khiong et al. Figure S9

Khiong et al. Figure S10





Khiong et al. Table S1

No	Gene	No	Gene	No	Gene
1	B230I18H07 Rik	15	Ehf	29	Loc 433459
2	Rag2	16	BC016548	30	D430041D05 Rik
3	Rag1	17	Elf-5	31	Loc 433460
4	Traf6	18	Cat	32	Hipk3
5	2600010E01 Rik	19	AW 539457	33	Cstf3
6	1810029F08 Rik	20	AI 429152	34	C130096D04 Rik
7	AI 194318	21	Gpiap 1	35	Loc 241593
8	Trim 44	22	Loc 433458	36	AV 216087
9	Fjx-1	23	Lmo2	37	4732246123 Rik
10	E430002G05 Rik	24	4931422A03 Rik	38	2310047K21 Rik
11	Slc1a	25	FbxO3	30	9930111I18 Rik
12	CD44	26	Cd59b	40	4931417A20
13	Pdhx	27	Cd59a	41	Ga17
14	Mmrp-19 pending	28	A930018P22 Rik	42	0610012H03 Rik

Table S2. A list of candidate genes. The candidate genes lay between the D2Mit333 and D2Mit473 markers.

Supplementary Figure 1. FACS analysis was performed using PBL. The percentage of CD8 T cells that were of memory phenotype CD8 T cells (CD122high) was investigated using over 300 mice from regular C57BL6, C57BL10, and BALB/c colonies.

Supplementary Figure 2. Cytogenetic GTL band analysis using activated T cells from MM mice.

Supplementary Figure 3. We investigated the nucleotide sequences of the candidate genes in the MM mouse and found one point mutation (G to A) in the core domain of the Rag1 gene. This mutation induced an amino acid substitution (R to Q) in the Rag1 protein.

Supplementary Figure 4. Western blotting for Rag1 molecules using CD4-CD8-thymocytes or B220+ bone marrow cells.

Supplementary Figure 5. Histological examination. The bars in the Figures indicate 100 or 50 μ m (magnified).

Supplementary Figure 6. In vivo immunization of TD antigens.

Supplementary Figure 7. In vivo immunization of TI antigens.

Supplementary Figure 8. Analysis of germinal center B cells.

Supplementary Figure 9. Results of hematological analysis.

Supplementary Figure 10. Variations in memory phenotypes of T cells and serum IgE in MM Mice.

Supplementary Table 1. List of candidate genes.