

hTLR8

Nomenclature	C57BL/6Smoc- <i>Tlr8</i> ^{tm2(TLR8)Smoc}
Cat. NO.	NM-HU-190044
Strain State	Repository Live

Gene Summary

Gene Symbol TLR8	Synonyms	
	NCBI ID	170744
	MGI ID	2176887
	Ensembl ID	ENSMUSG000000040522
	Human Ortholog	TLR8

Model Description

The endogenous mouse Tlr8 gene was replaced by human TLR8 gene.

Research Application: Immunotherapy, cancer research, drug screening

*Literature published using this strain should indicate: hTLR8 mice (Cat. NO. NM-HU-190044) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

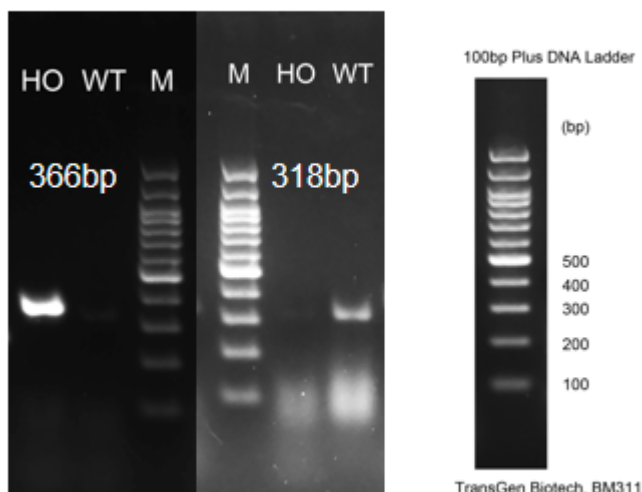


Fig1. Detection of TLR8 expression in spleen, lung and thymus by RT-PCR. Wild type: only one band at 318 bp with primers F1/R1(mTlr8); Homoygous: only one band at 366 bp with primers F2/R2(hTLR8); Abbr.. M, DNA marker; HO, homozygous; HE, heterozygous; WT, wild type.

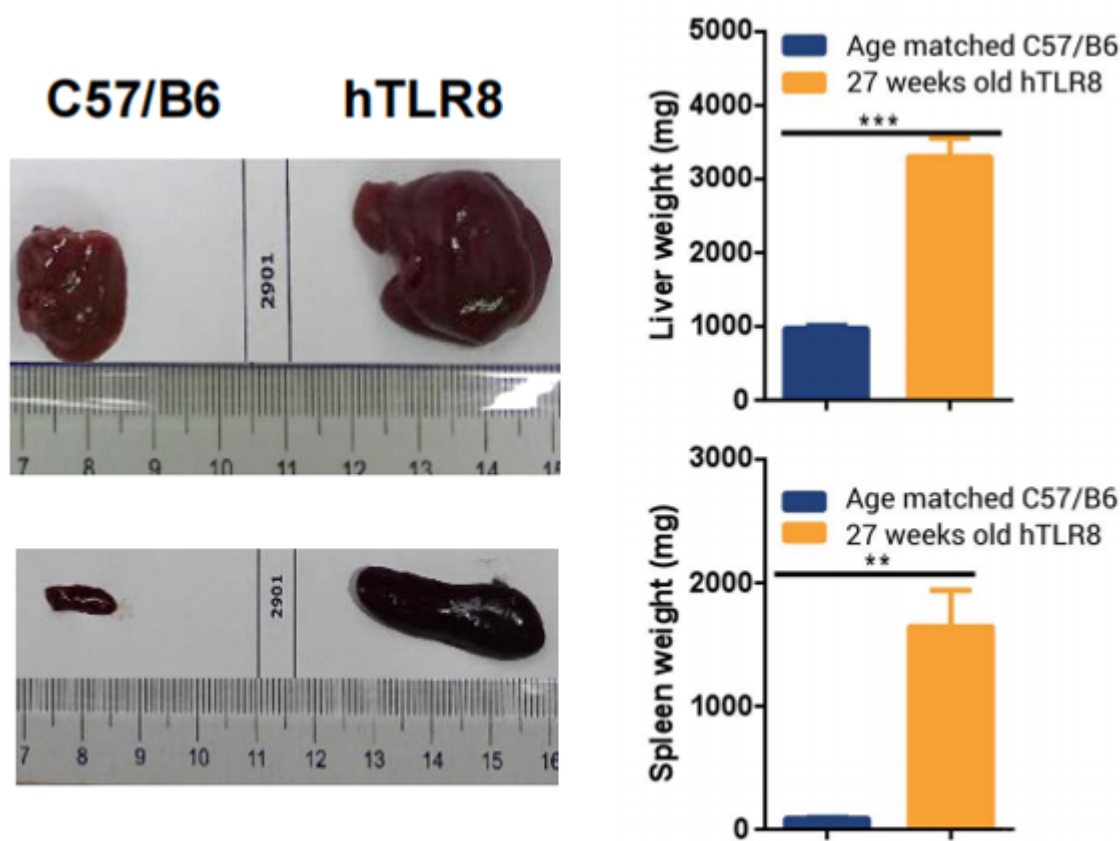


Fig 2. The representative picture of hepatomegaly(top), splenomegaly (bottom) in aged hTLR8 mice.

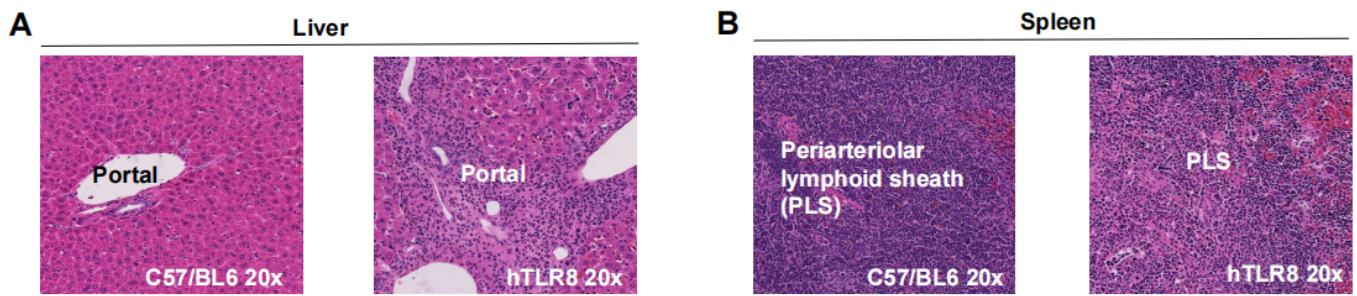


Fig 3. Histology of (A) spleen and (B) liver in aged hTLR8 mice. A prominent portal inflammation with fibrosis and bile duct hyperplasia in liver (A); Decreased cellularity in periarteriolar lymphoid sheath and the increase of histiocytes in the red pulp of spleen (B).

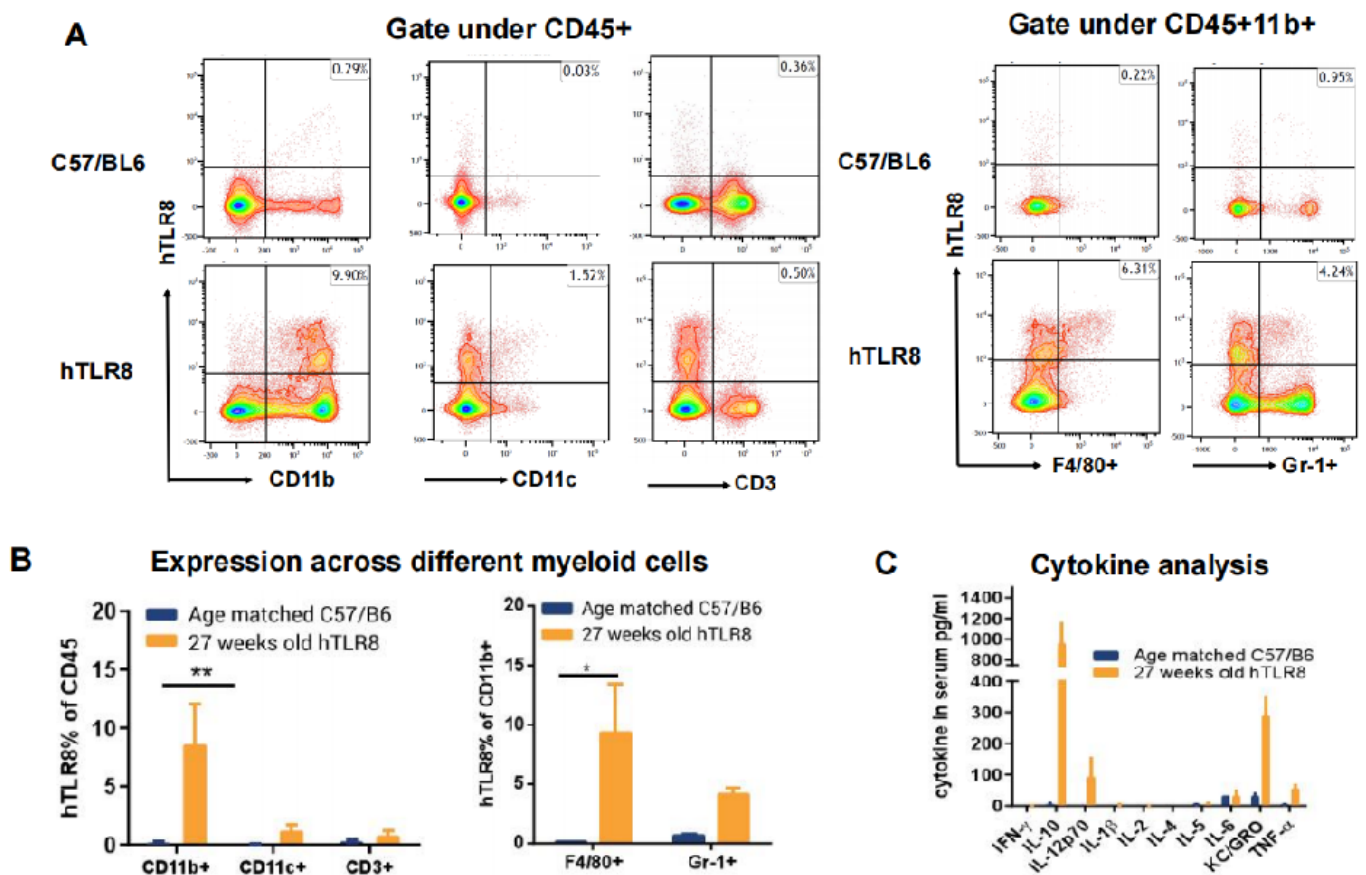


Fig 4. The expression pattern of hTLR8 in myeloid cells (A, B) and cytokine analysis in serum of aged hTLR8 mice (C).

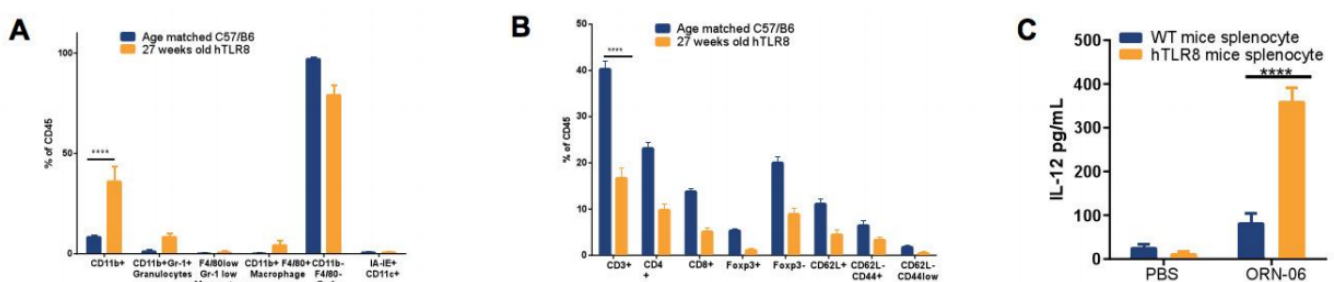


Fig 5. The dynamic change of (A) myeloid and (B) lymphocyte lineage in the spleen of hTLR8 mice.

mice; and (C) in vitro stimulation of splenocytes from wild type (WT) C57BL/6 and hTLR8 mice with hTLR8 agonist ORN-06

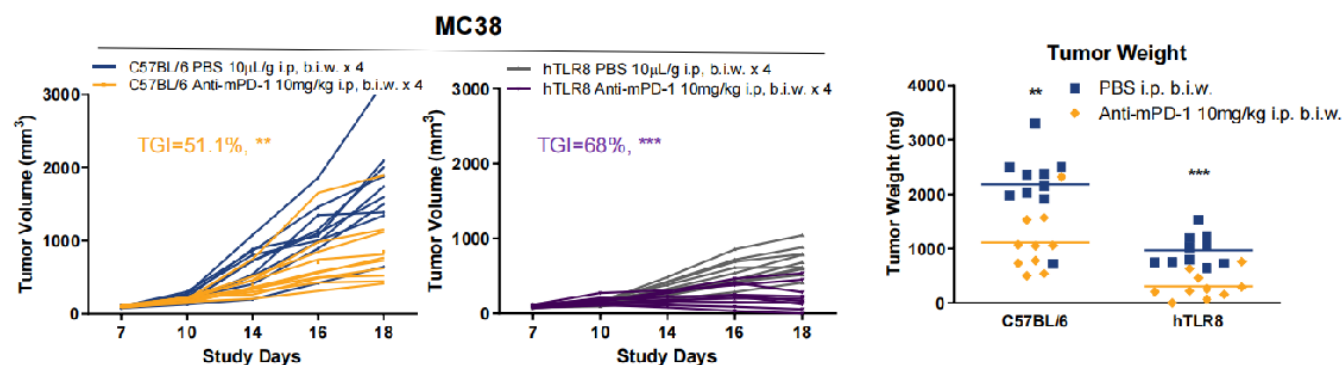


Fig 6. MC-38 tumor growth curve and tumor weight of individual mice from the 4 groups. One way ANOVA *, **, and *** refer to $p < 0.05$, $p < 0.01$, and $p < 0.001$, respectively

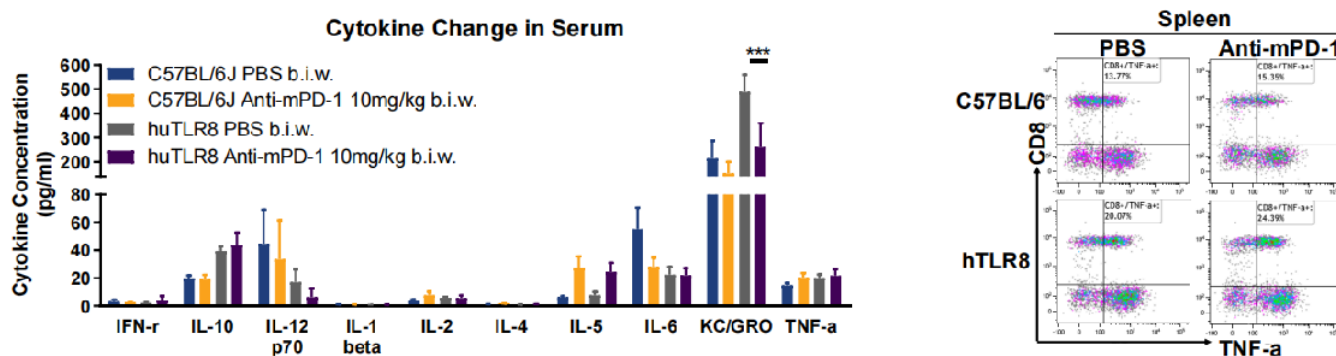


Fig 7. Serum level of cytokine analysis by MSD and intracellular TNF-a staining by FACS in splenocytes.

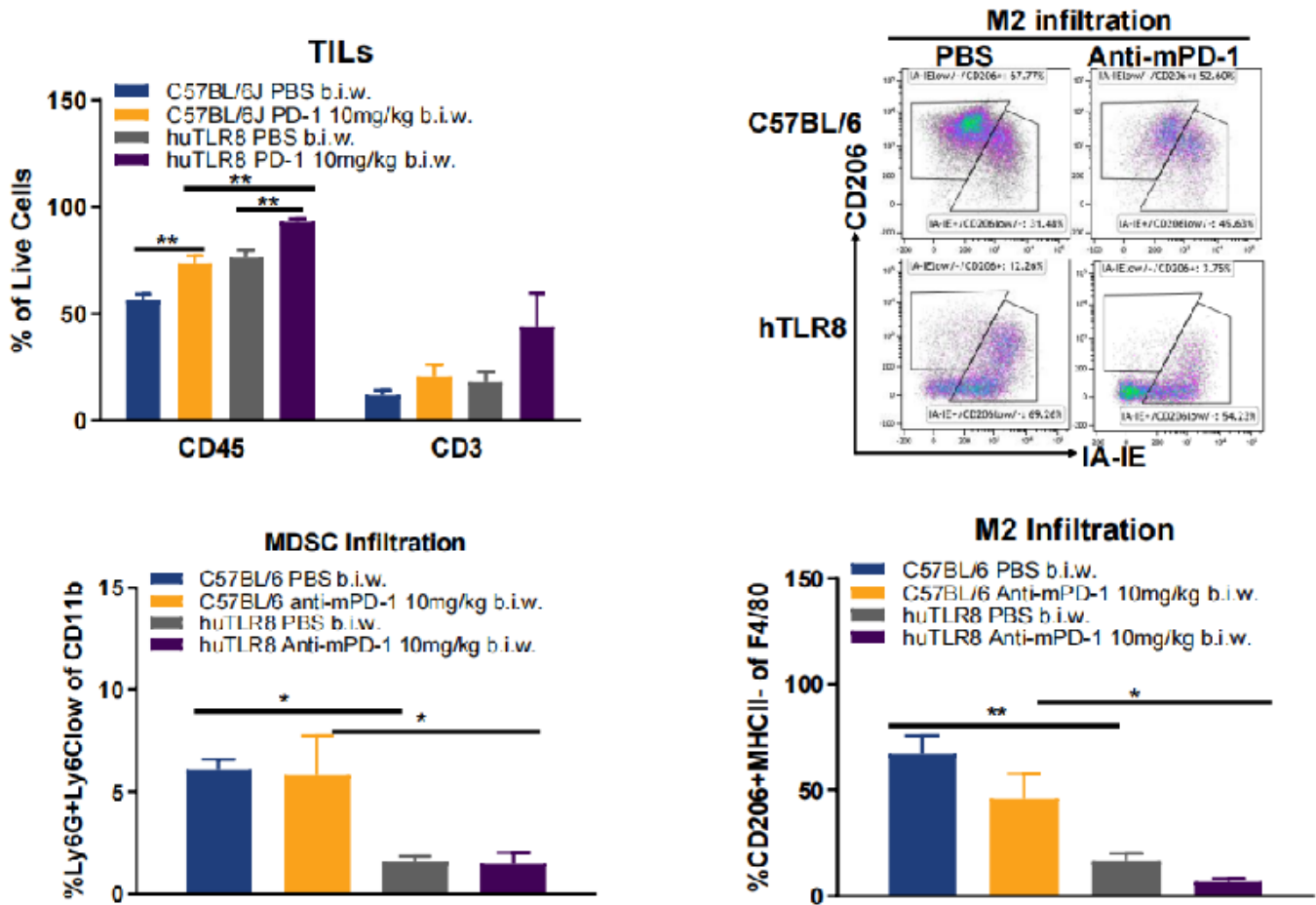


Fig 8. Tumor infiltrated immune component analysis.

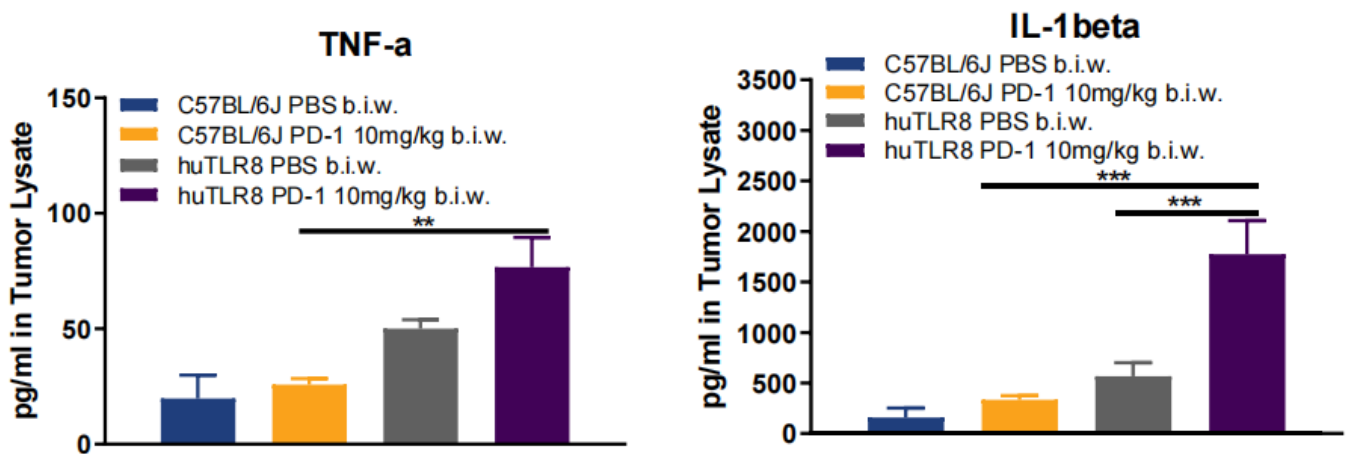


Fig 9. Pro-inflammatory cytokines in the tumor cell lysate. *Validation data are provided by Crownbio.