

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	ENSMUSG00000040522
	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

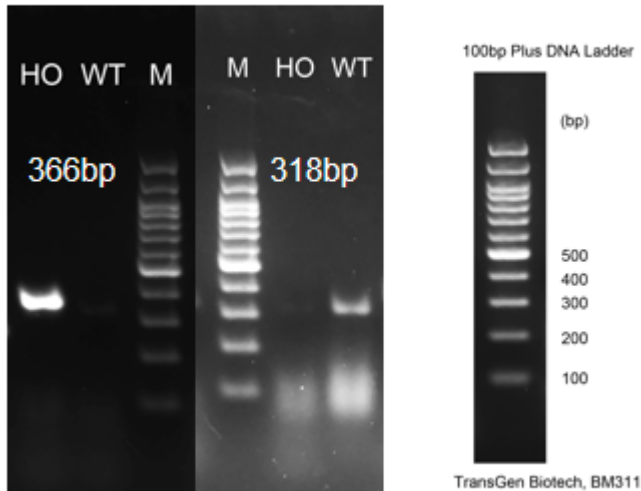


Fig1. Detection of TLR8 expression in spleen, lung and thymus by RT-PCR. Wild type: only one band at 318 bp with primers F1/R1(mTlr8); Homoygous: only one band at 366 bp with primers F2/R2(hTLR8); Abbr.. M, DNA marker; HO, homozygous; HE, heterozygous; WT, wild type.

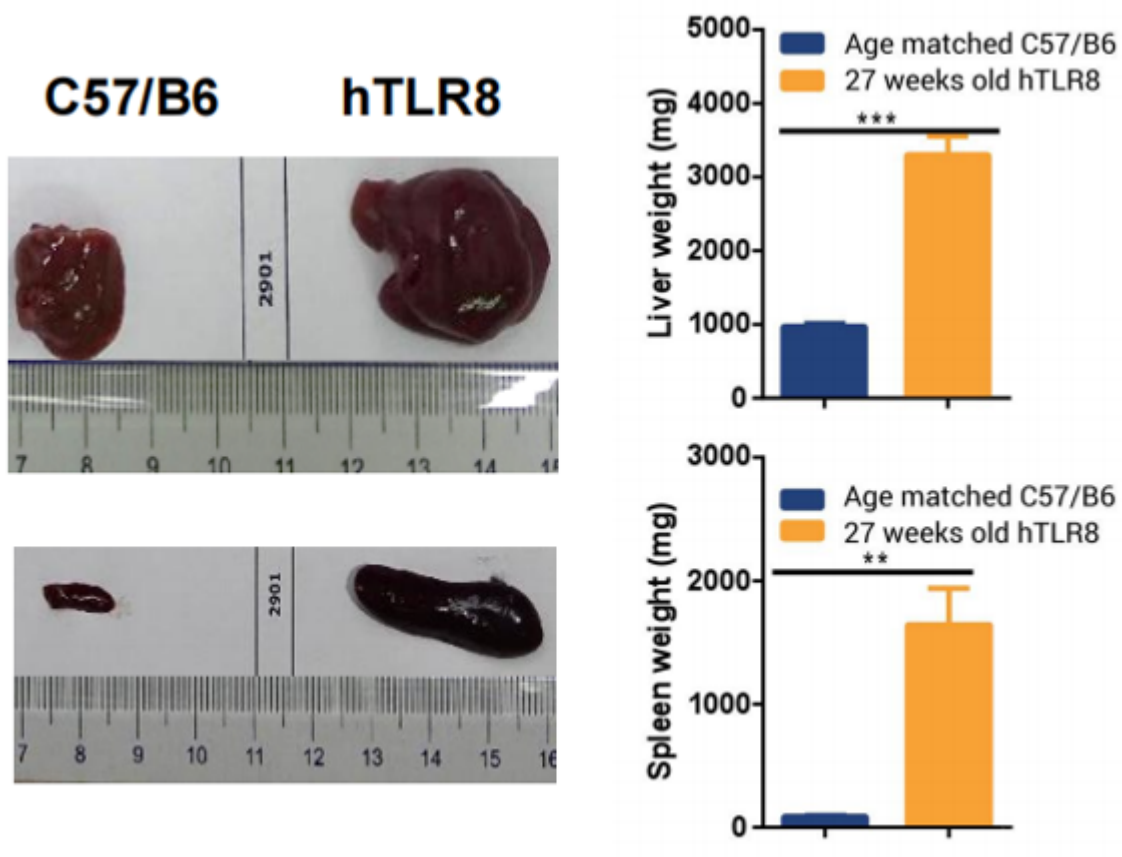


Fig 2. The representative picture of hepatomegaly(top), splenomegaly (bottom) in aged hTLR8 mice.

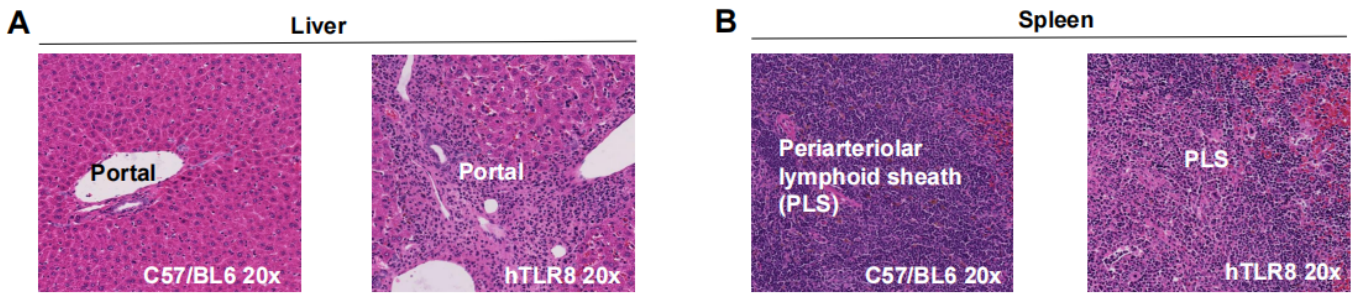


Fig 3. Histology of (A) spleen and (B) liver in aged hTLR8 mice. A prominent portal inflammation with fibrosis and bile duct hyperplasia in liver (A); Decreased cellularity in periarteriolar lymphoid sheath and the increase of histiocytes in the red pulp of spleen (B).

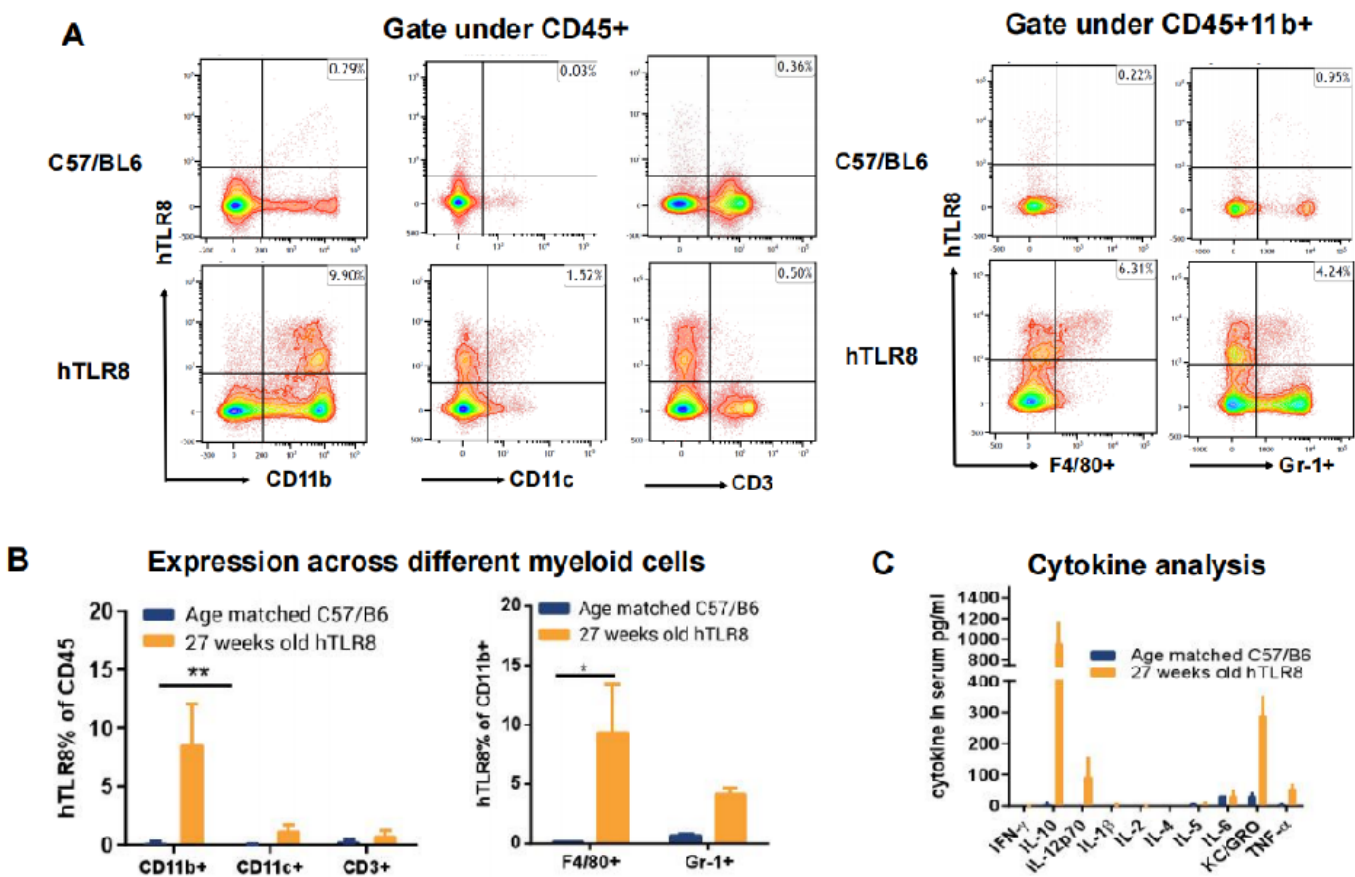


Fig 4. The expression pattern of hTLR8 in myeloid cells (A, B); and cytokine analysis in serum of aged hTLR8 mice (C).

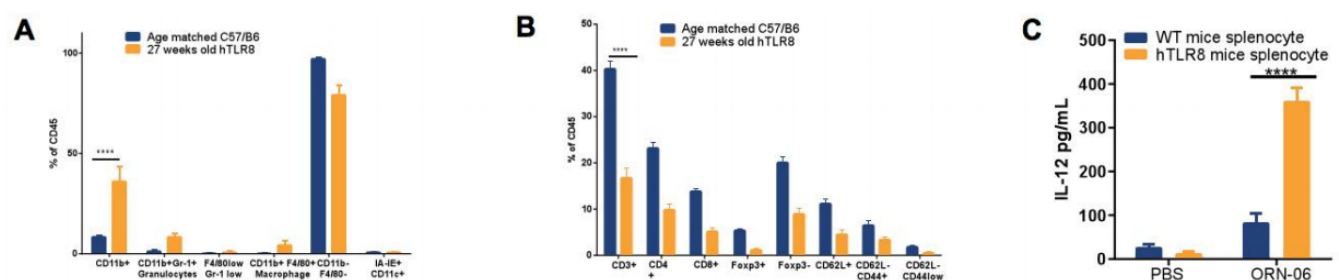


Fig 5. The dynamic change of (A) myeloid and (B) lymphocyte lineage in the spleen of hTLR8 mice.

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

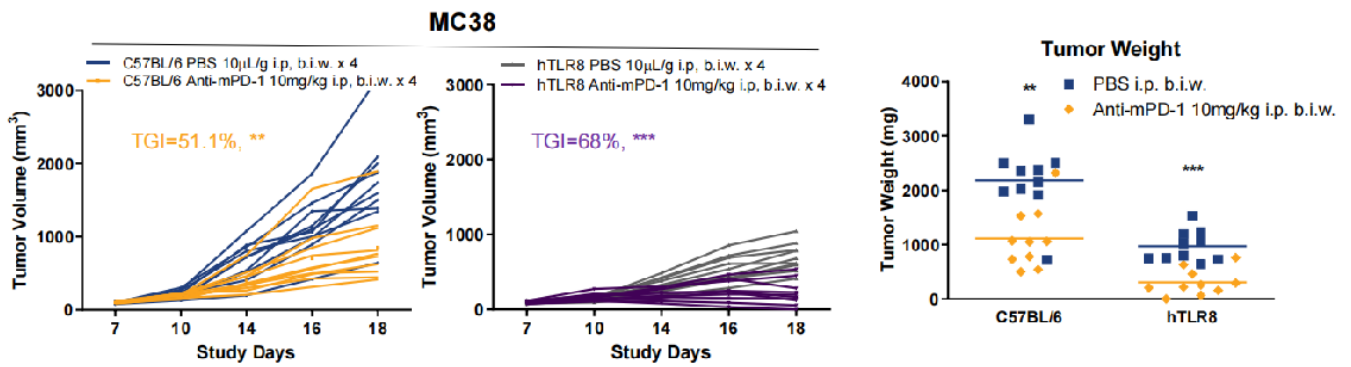


Fig 6. MC-38 tumor growth curve and tumor weight of individual mice from the 4 groups. One way ANOVA *, **, and * refer to $p < 0.05$, $p < 0.01$, and $p < 0.001$, respectively**

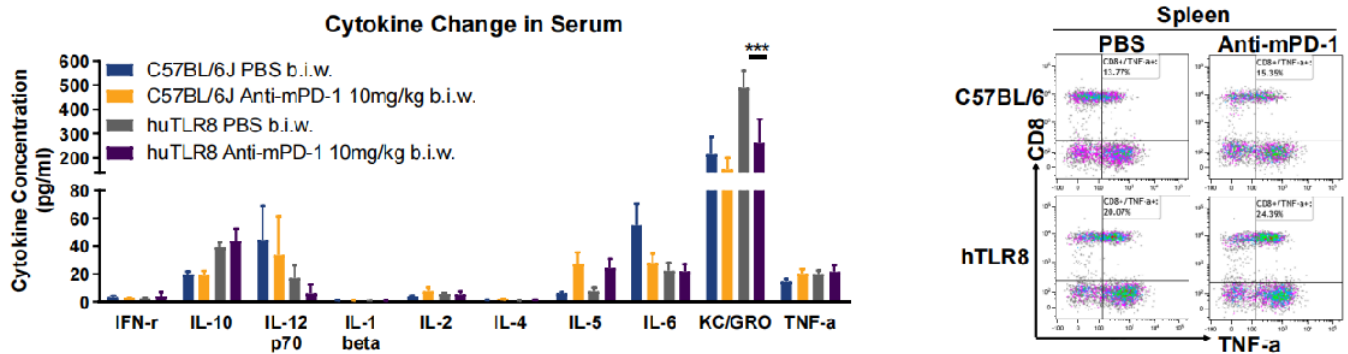


Fig 7. Serum level of cytokine analysis by MSD and intracellular TNF-a staining by FACS in splenocytes.

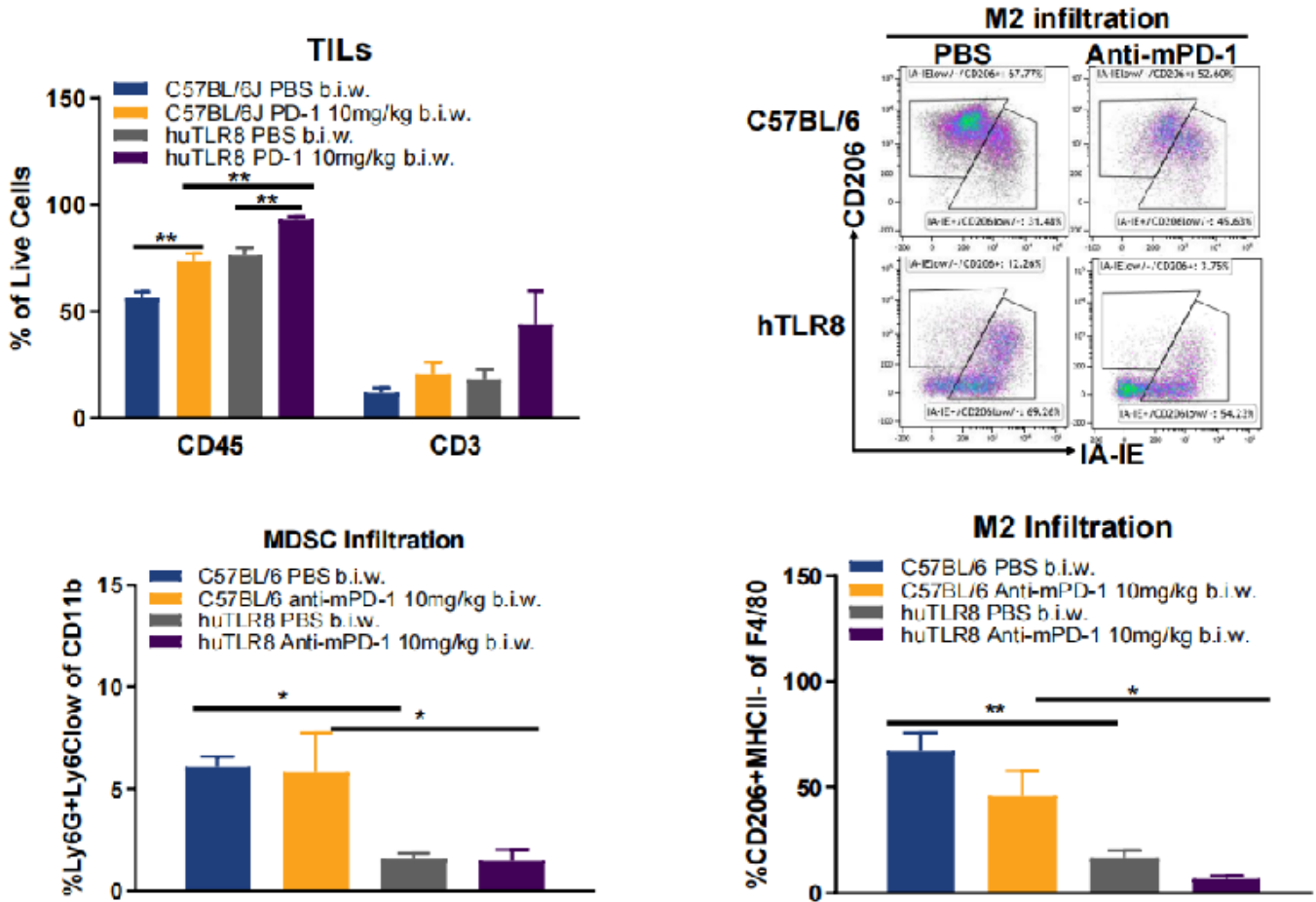


Fig 8. Tumor infiltrated immune component analysis.

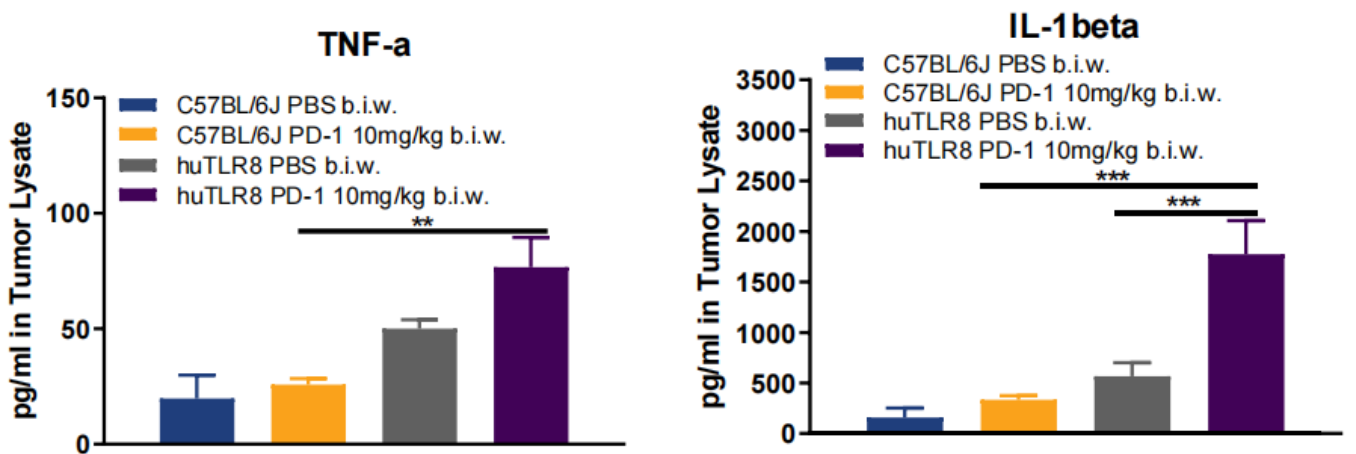


Fig 9. Pro-inflammatory cytokines in the tumor cell lysate. *Validation data are provided by Crownbio.