hCTLA-4

Nomenclature	C57BL/6Smoc-*Ctla4*$^{em1(hCTLA4)\ Smoc}$
Cat. NO.	NM-HU-00014
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol CTLA4	**Synonyms**	Cd152; Ly-56; Ctla-4
	NCBI ID	12477
	MGI ID	88556
	Ensembl ID	ENSMUSG00000026011
	Human Ortholog	CTLA4

Model Description

The endogenous mouse Ctal4 gene was replaced by human CTLA4 gene. While hCTLA4(2)(Stock No.NM-HU-190038) mice function similarly to hCTLA4 mice,for more detailed information please contact our technical advisor.

Research Application: cancer research,Immunotherapy,drug screening;

*Literature published using this strain should indicate: hCTLA-4 mice (Cat. NO. NM-HU-00014) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

- Flow cytometry (FACS) analysis data of humanized CTLA4 mouse

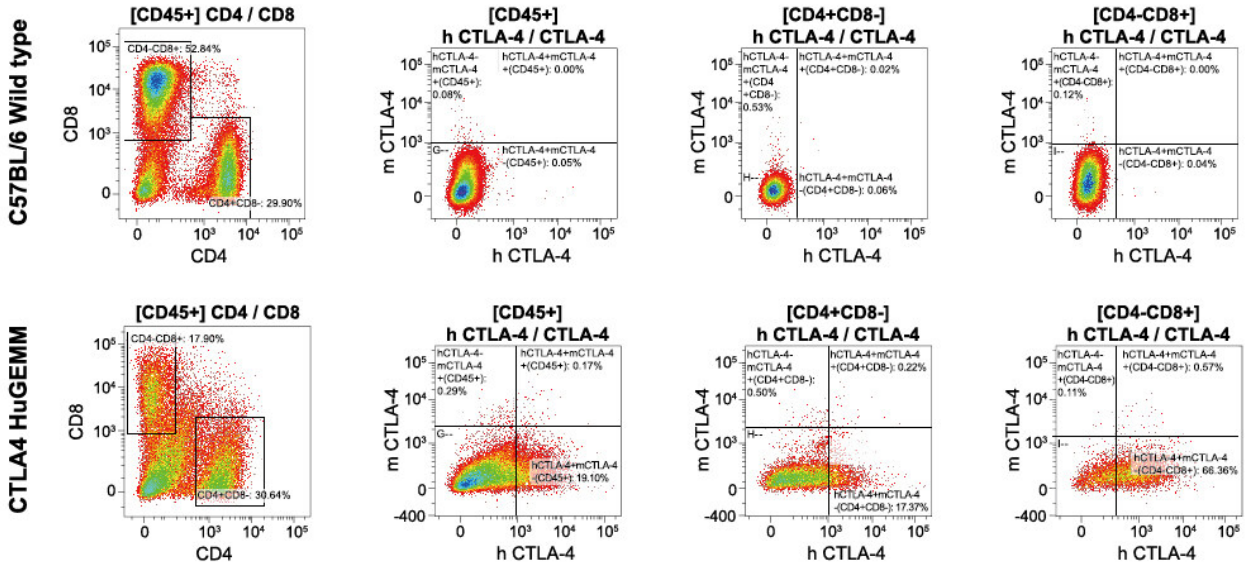
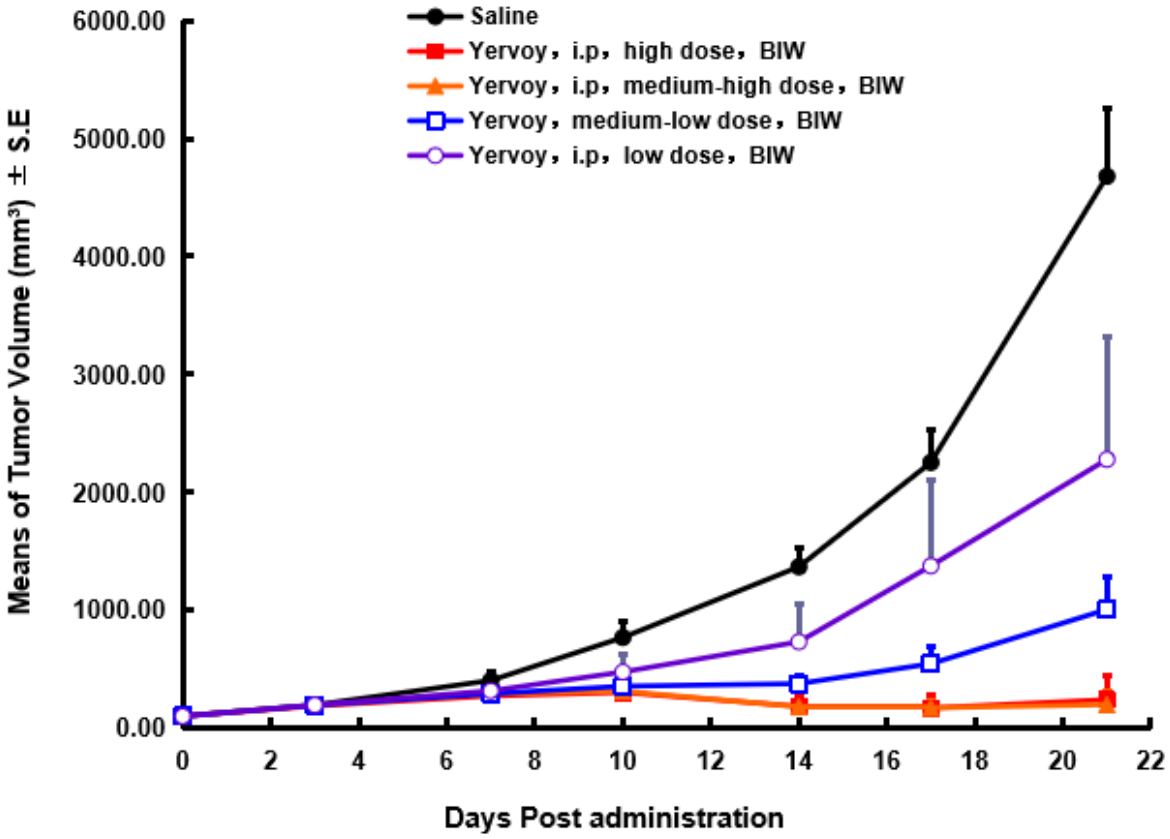


Figure 1. Expression of CTLA4 in the activated spleen lymphocytes of humanized CTLA4 mice is detected by FACS. The spleen lymphocytes of homozygous humanized CTLA4 mice were activated by anti-CD3 and anti-CD28 for 72 hours, and then collected for staining. The expression of humanized CTLA4 was detected by FACS. The results showed that the active expression of humanized CTLA4 can be detected in both activated CD4+ and CD8+ T lymphocytes collected from homozygous humanized CTLA4 mice. (Completed in collaboration with CrownBio).

- In vivo validation in a MC38 tumor-bearing model of humanized CTLA4 mouse



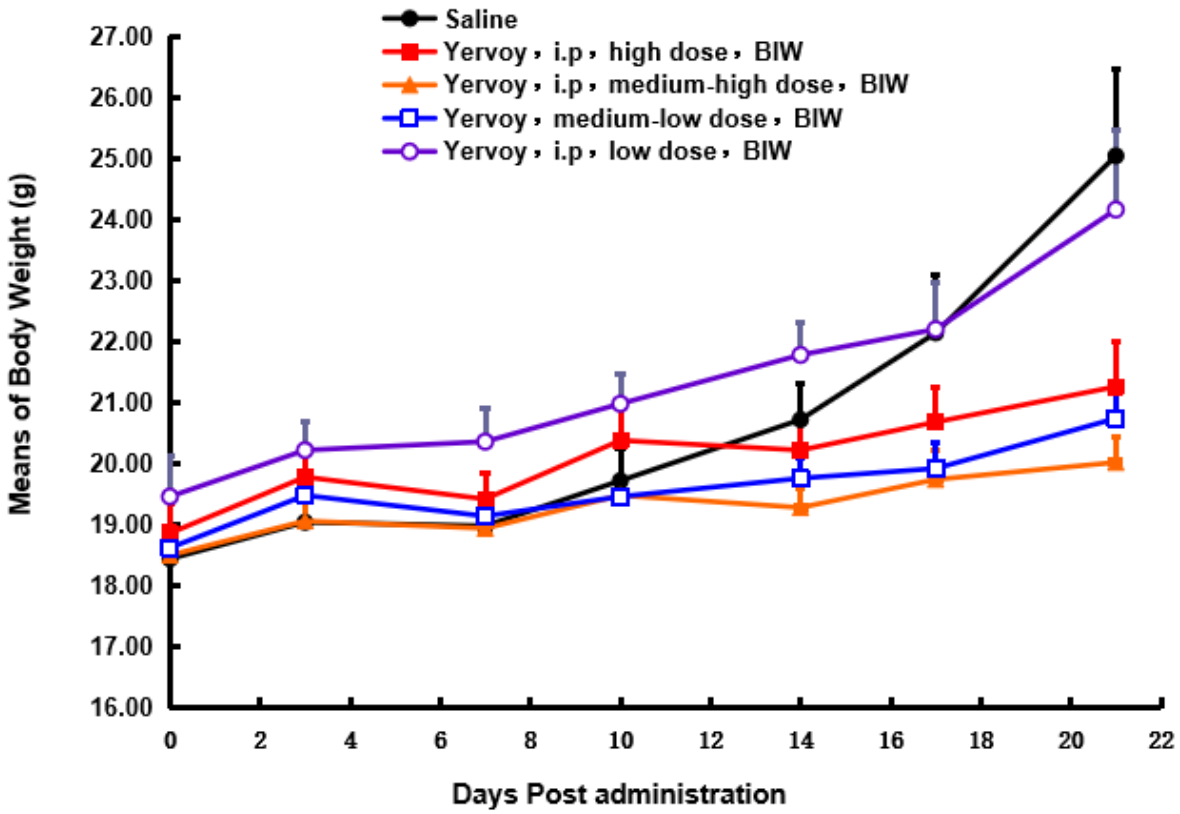


Figure 2. In vivo anti-tumor effect of Ipilimumab, a humanized anti-CTLA4 antibody, in a humanized mouse model of CTLA4

In vivo validation of anti-tumor efficacy in a MC38 tumor-bearing model of humanized CTLA4 mice. Homozygous humanized CTLA4 mice were inoculated with MC38 colon cancer cells. The results showed: Yervoy, a drug targeting human CTLA4, showed a very significant anti-tumor effect ($p<0.001$), demonstrating that the humanized CTLA4 mice are a good in vivo model for validating the efficacy of antibodies targeting human CTLA4.