

hTIGIT

Nomenclature	C57BL/6Smoc- <i>Tigit</i> ^{em1(hTIGIT)Smoc}
Cat. NO.	NM-HU-00053
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol TIGIT	Synonyms	Vstm3
	NCBI ID	100043314
	MGI ID	3642260
	Ensembl ID	ENSMUSG00000071552
	Human Ortholog	TIGIT

Model Description

The endogenous mouse *Tigit* gene was replaced by human TIGIT gene. While hTIGIT(3)(Stock No.NM-HU-200244) mice function similarly to hTIGIT mice,for more detailed information please contact our technical advisor.

Research Application: Immunotherapy,cancer research,drug screening

*Literature published using this strain should indicate: hTIGIT mice (Cat. NO. NM-HU-00053) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

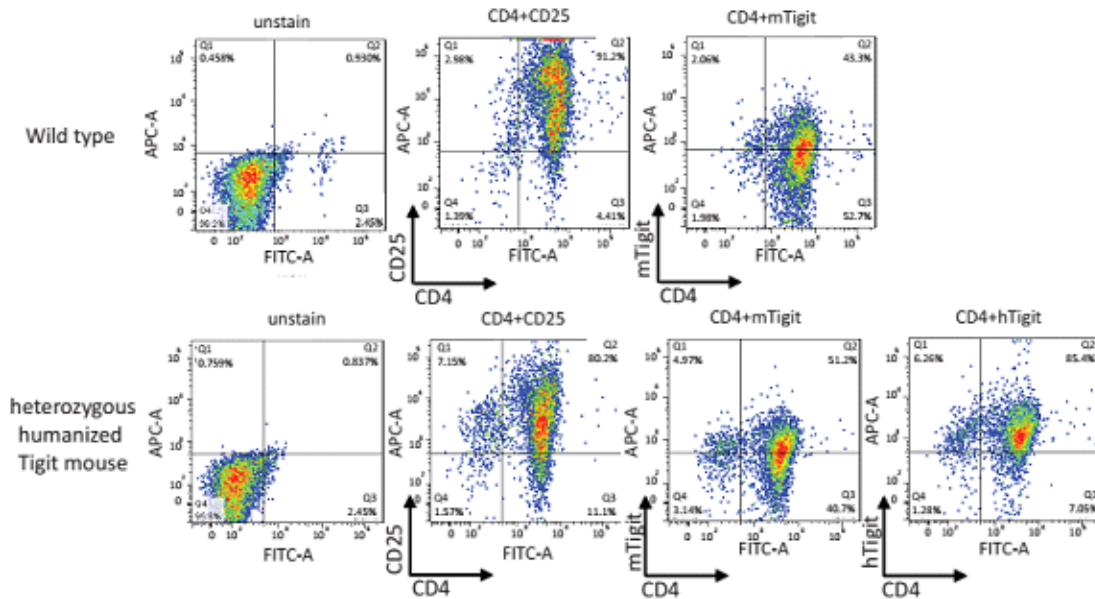
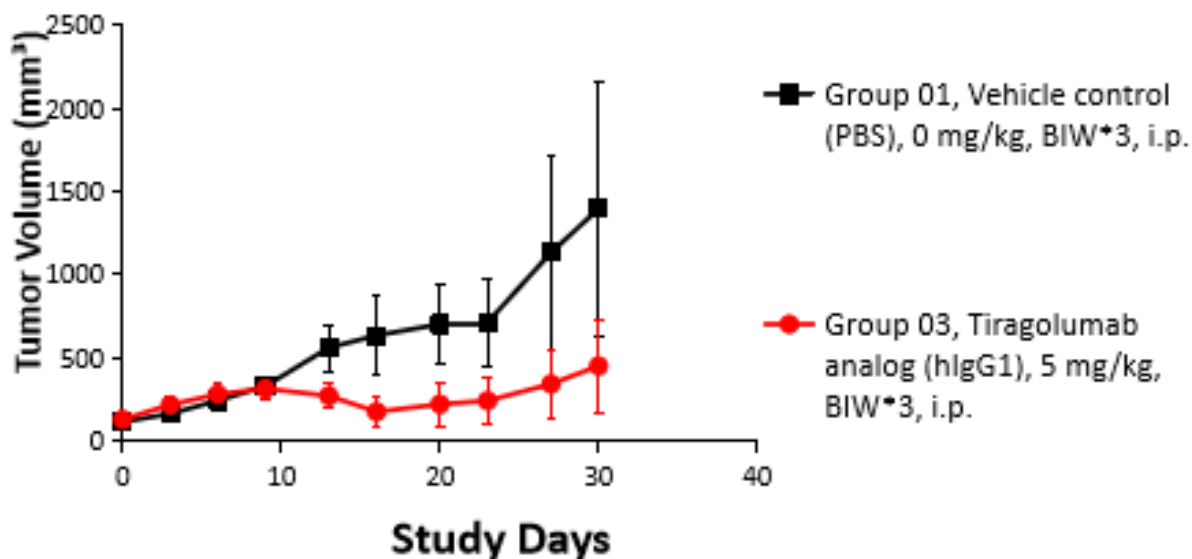


Figure 1. Expression of human TIGIT in the polarized CD4⁺ T cells of humanized TIGIT mice is detected by FACS. Spleen Naive CD4⁺ T cells were isolated from heterozygous humanized TIGIT mice. After in vitro stimulation, activation and expansion by cytokines and antibodies, the CD4⁺ T cells were re-stimulated with PMA/ionomycin before the expression of human TIGIT in polarized CD4⁺ T cells was detected by FACS. The results showed that the active expression of human TIGIT could be detected in polarized CD4⁺ T cells collected from humanized TIGIT mice, and the expression trend of human TIGIT was similar to that of murine TIGIT.

Mean Tumor Volume \pm SEM



Mean Body Weight \pm SEM

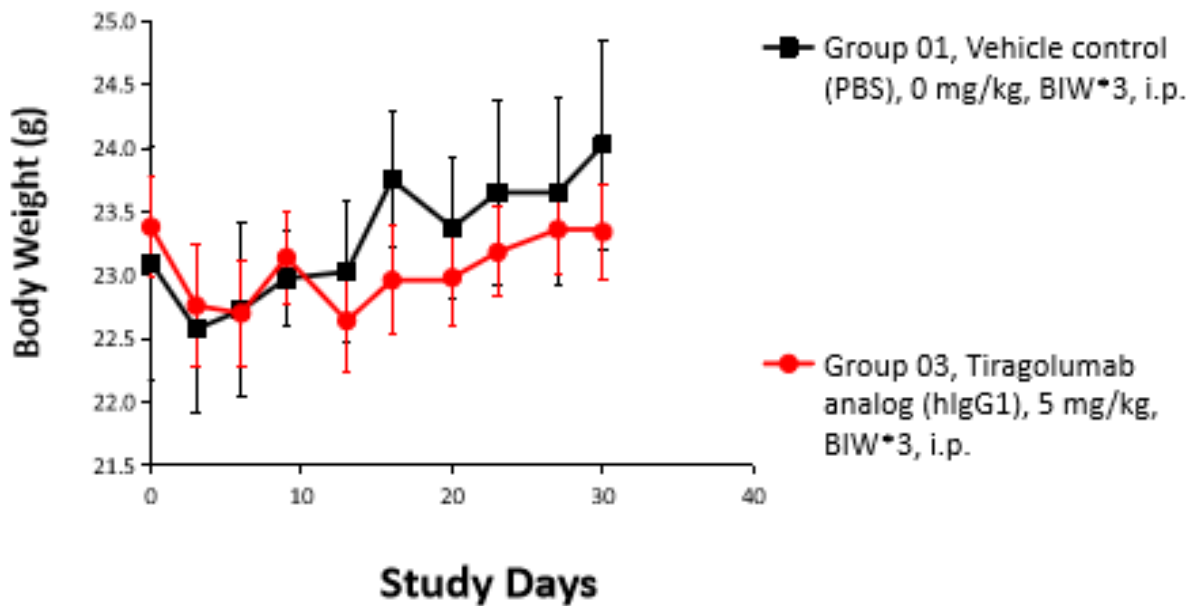
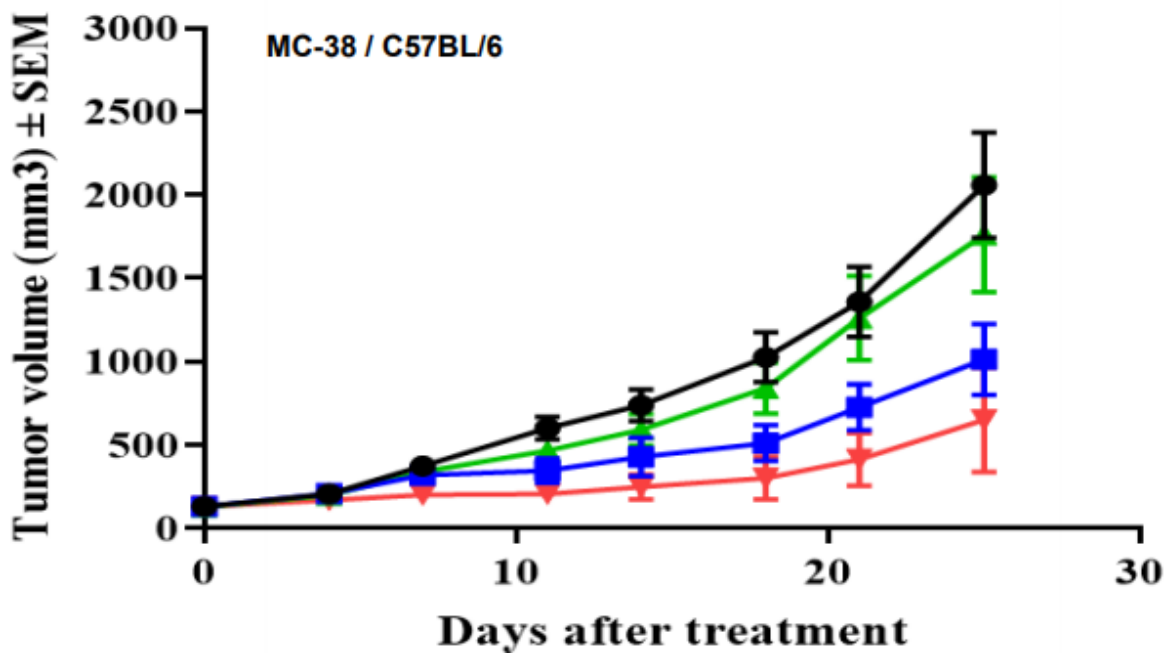


Fig 2. In vivo validation of anti-tumor efficacy in a Hepa1-6 tumor-bearing model of humanized TIGIT mice. Homozygous humanized TIGIT mice were inoculated with Hepa1-6 cells. After the tumors grew to 110 mm³, the animals were randomly assigned into a control group and a treatment group. The results showed a significant anti-tumor effect was observed when the antibody targeting human TIGIT. (Completed in collaboration with CrownBio).



- G1 ● IgG1, 3mg/kg
- G2 ■ anti-PD-L1 analogue, 3mg/kg
- G3 ▲ anti-TIGIT analogue, 10mg/kg
- G4 ▼ anti-PD-L1 analogue, 3mg/kg + anti-TIGIT analogue, 10mg/kg

Fig 3. In vivo validation of anti-tumor efficacy in a MC38 tumor-bearing model of humanized TIGIT mice. Homozygous humanized TIGIT mice were inoculated with MC38 colon cancer cells. After the tumors grew to 130 mm³, the animals were randomly assigned into a control group and a treatment group (n=7). The results showed a significant anti-tumor effect was observed when the antibody targeting human TIGIT was administered together with Anti-PD-L1 analogue. (Completed in collaboration with Harbour BioMed).