hTNFa-Tg

Nomenclature	C57BL/6Smoc-Tgtn(hTNFa promoter-hTNFa-pA)Smoc
Cat. NO.	NM-TG-200004
Strain State	Repository Live

Gene Summary

Gene Symbol	**Synonyms**	DIF, TNFA, TNFSF2, TNLG1F, TNF-alpha
	NCBI ID	7124
	MGI ID	Null
	Ensembl ID	ENSG00000232810
	Human Ortholog	TNFa

Model Description

These transgenic mice harbor hTNFa promoter-hTNFa-pA expression cassette.

*Literature published using this strain should indicate: hTNFa-Tg mice (Cat. NO. NM-TG-200004) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

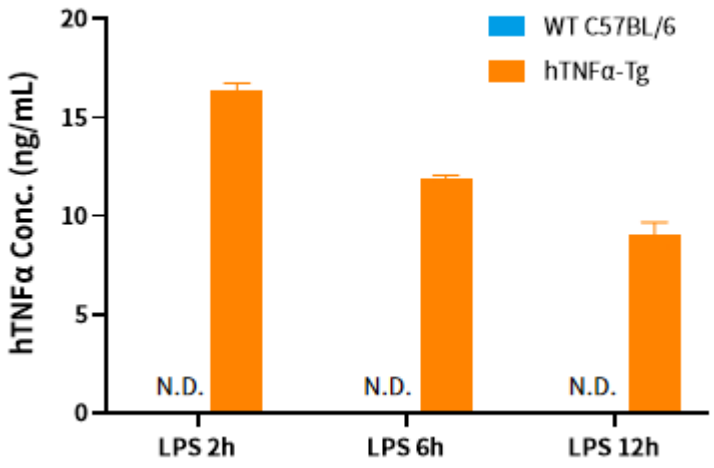

Fig.1 Detection of hTNFα expression in serum by ELISA (male, 8-12wks, n=2).

Abbr. WT, wild type.

Note. hTNFα-Tg and C57BL/6 mice were i.p. injected with LPS for 2h.

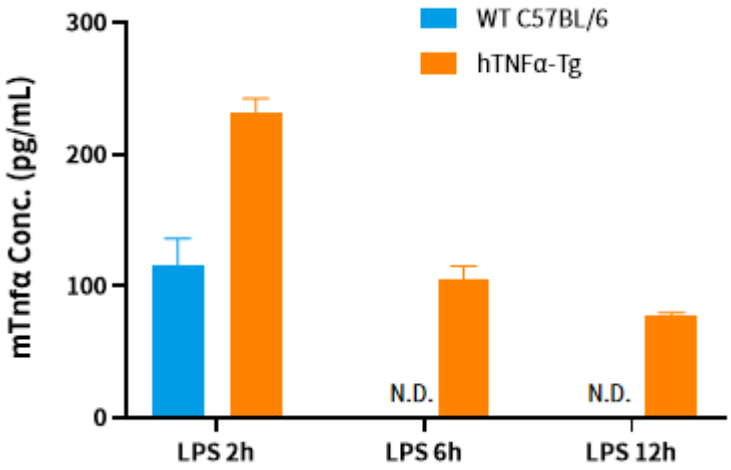

Fig.2 Detection of mTnfα expression in serum by ELISA (male, 8-12wks, n=2).

Abbr. WT, wild type.

Note. hTNFα-Tg and C57BL/6 mice were i.p. injected with LPS.

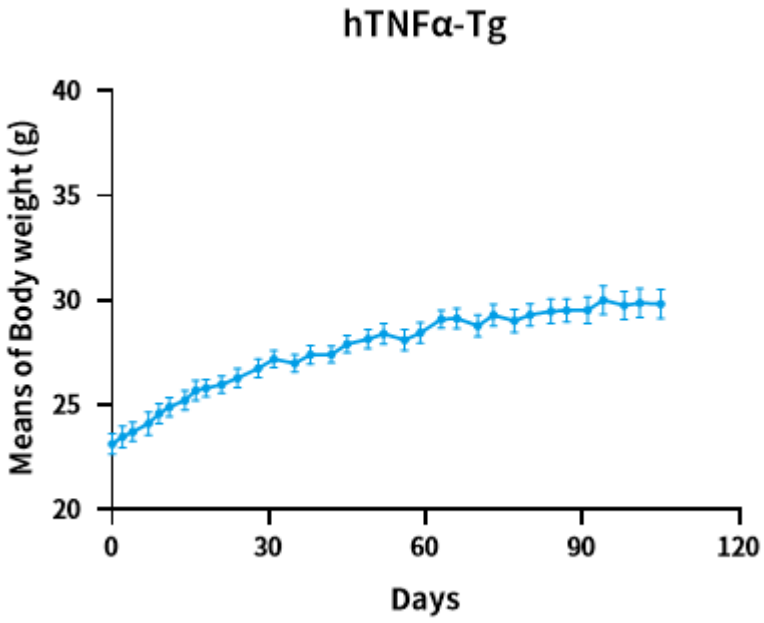

Fig.3 Body Weight of hTNFα-Tg (male, 5-6wks, n=10).

Fig4. Clinical score of joint swelling in hTNFa-Tg mice and representative diagram of hind limb joints of mice in each group on day 94.

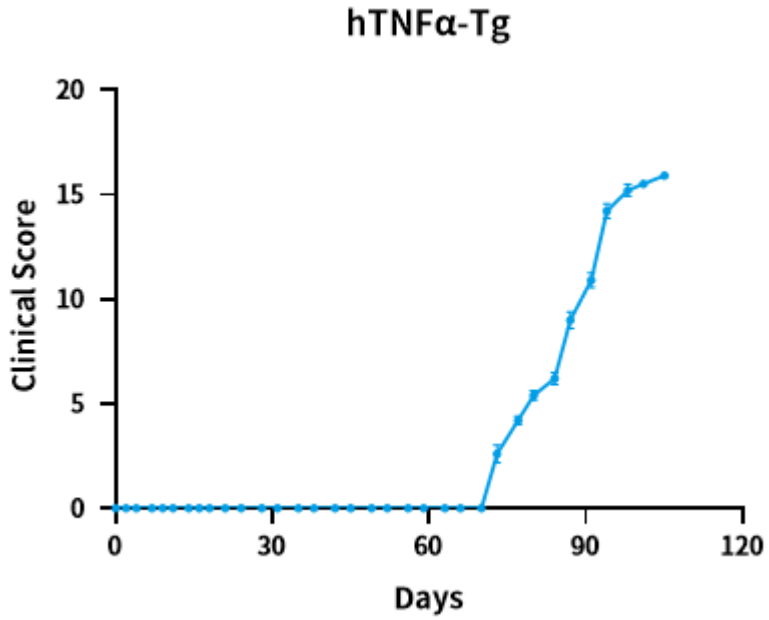

Fig.5 Clinical score of joint swelling hTNFα mice (male, 5-6wks, n=10).

Signs of arthritis were assessed by a visual score where 0 = Normal paw, 1 = one toe inflamed or swollen, 2 = more than one toe, but not entire paw, or mild swelling of the entire paw, 3 = entire paw inflamed and swollen, and 4 = very inflamed and swollen paw or ankylosed paw.

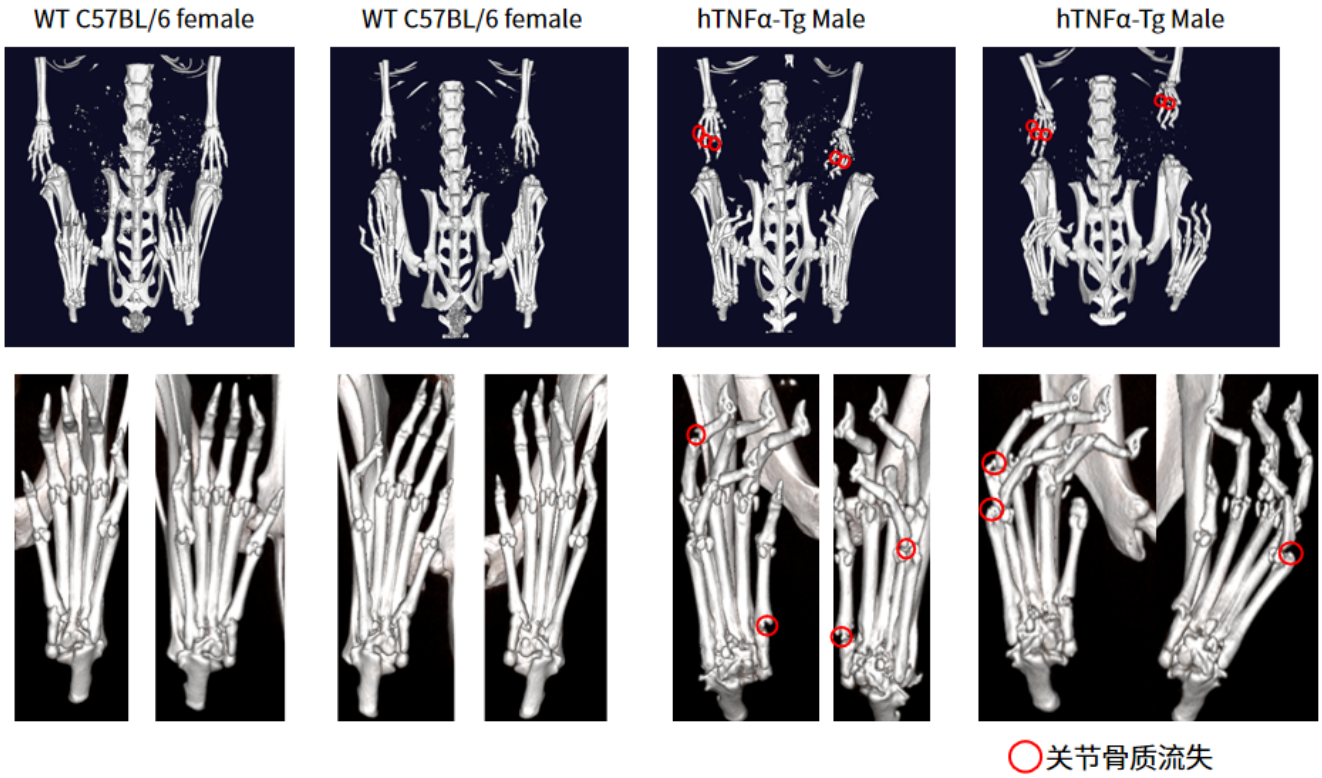

Fig.6 Micro-CT image of hTNFα-Tg mice. hTNFα-Tg mice have significant articular bone flow type.

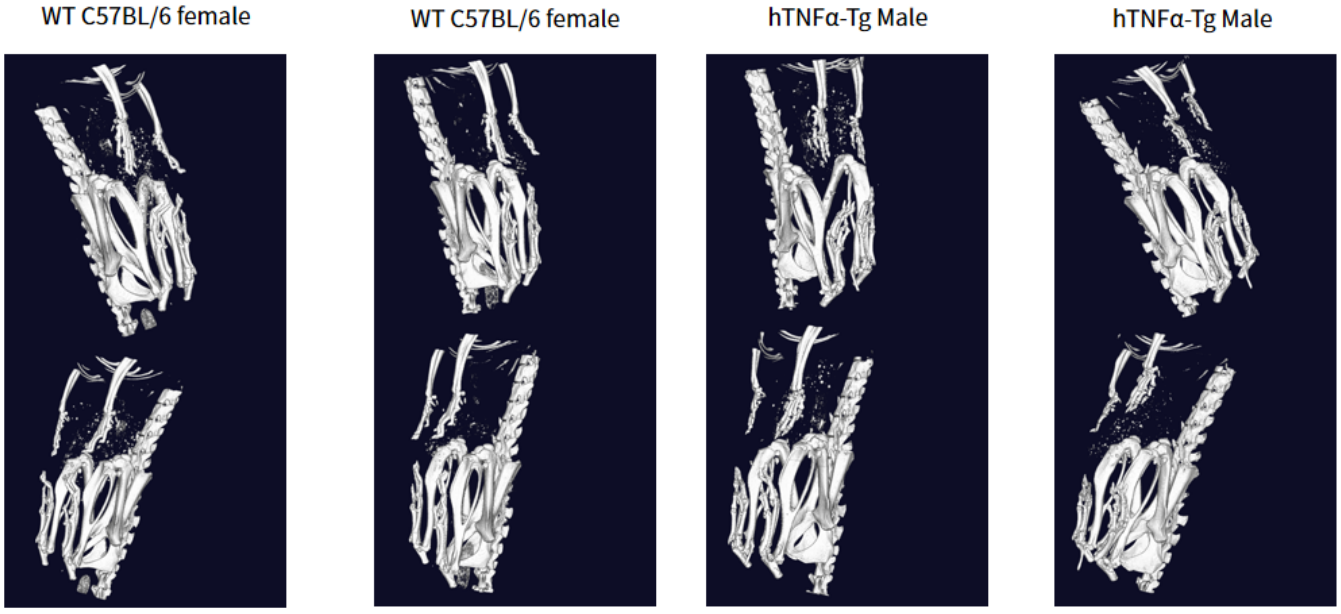

Fig.7 Micro-CT image of hTNFα-Tg mice. The tibia of hTNFα-Tg mice shows no significant difference.

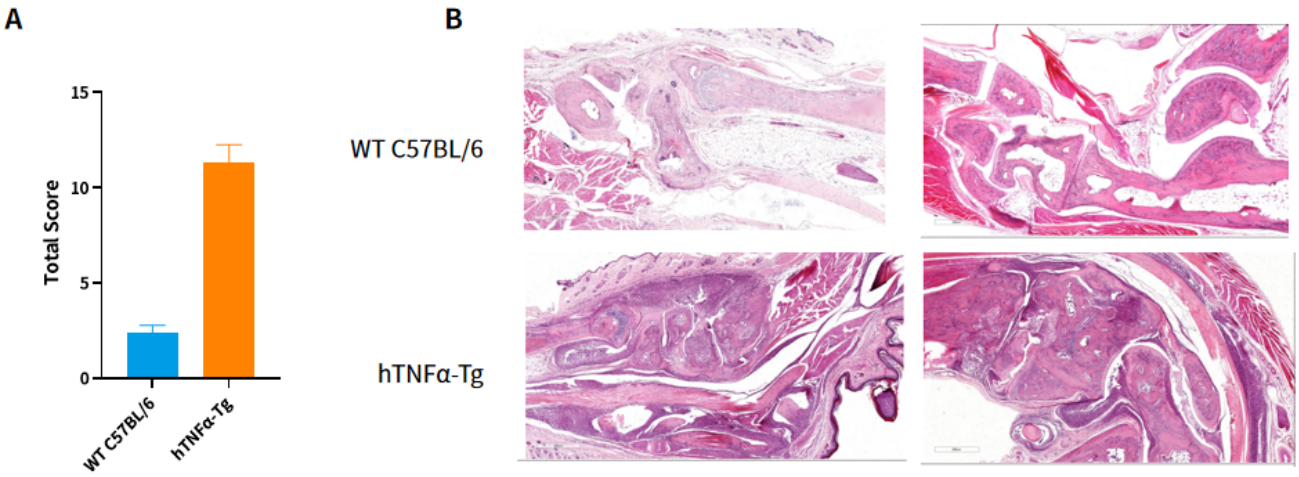

Fig.8 Score of hTNFα-Tgmice (A) and H&E pathology(B). (male)

Compared with the WT C57BL/6, the mixed inflammatory cell infiltration in hTNFα-Tg mice is significantly increased, with obvious proliferation of synovial joints, formation of pannus, fibroblast tissue production, and cartilage erosion.