

For Research Use Only

# NeutraKine® TGF beta 1 Mouse McAb

Catalog Number: 69012-1-Ig **8 Publications**



## Basic Information

Catalog Number:	69012-1-Ig	GenBank Accession Number:	Purification Method:
Source:	Mouse	GeneID (NCBI):	Protein G purification
Isotype:	IgG1	7040	CloneNo.:
Immunogen Catalog Number:	HZ-1011	UNIPROT ID:	1E3E9
		P01137	Recommended Dilutions:
		Full Name:	Neutralization: 1:10-1:100
		transforming growth factor, beta 1	IHC: 1:500-1:2000
		Calculated MW:	ELISA: 1:10-1:100
		44 kDa	

## Applications

Tested Applications:	Positive Controls:
Neutralization, ELISA	Neutralization : HT-2 cells,
Cited Applications:	IHC : human prostate cancer tissue,
Neutralization	ELISA : Recombinant protein,
Species Specificity:	
human	
Cited Species:	
human, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

TGFB, also named as LAP and TGFB1, is a multifunctional peptide that controls proliferation, differentiation, and other functions in many cell types. TGFB acts synergistically with TGFA in inducing transformation. It also acts as a negative autocrine growth factor. Dysregulation of TGFB activation and signaling may result in apoptosis. Many cells synthesize TGFB and almost all of them have specific receptors for it. TGFB positively and negatively regulates many other growth factors. It plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts. It is highly expressed in bone. Mutation of TGFB are the cause of Camurati-Engelmann disease (CED) which known as progressive diaphyseal dysplasia 1 (DPD1).

This antibody can be used to neutralize the bioactivity of TGF beta 1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xueqi Yan	35413945	Cell Death Discov	Neutralization
Jiao Yin	35387564	Bioengineered	Neutralization
Fang Zhao	40116446	ACS Appl Mater Interfaces	

## Storage

**Storage:**  
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

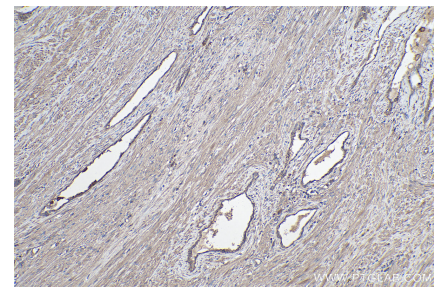
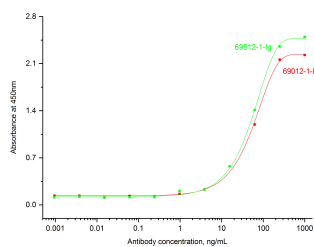
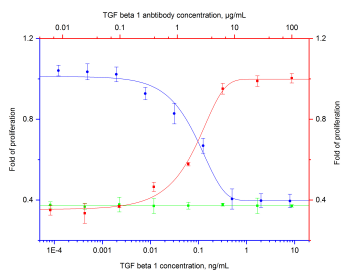
**Storage Buffer:**  
Sterile PBS, pH7.4

Aliquoting is unnecessary for -20°C storage

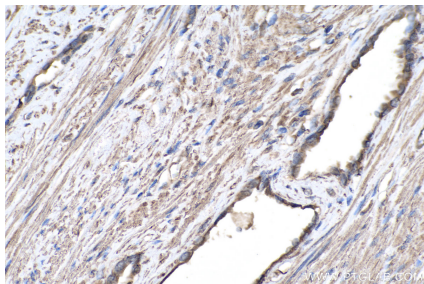
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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## Selected Validation Data



Recombinant human TGF beta 1 (Cat.NO. HZ-1011) inhibits IL-4 induced proliferation of mouse HT-2 cells in a dose dependent manner (blue curve, refer to bottom X-left Y). The activity of human TGF beta 1 (0.5 ng/mL HZ-1011) is neutralized by mouse anti-human TGF beta 1 antibody 69012-1-Ig at serial dose (red curve, refer to top X-right Y). The ND50 is typically 1-5  $\mu$ g/mL. The NeutraControl mouse anti-human TGF beta 1 monoclonal antibody 69512-1-Ig could recognize human



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 69012-1-Ig (NeutraKine® TGF beta 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Indirect ELISA was carried out by coating recombinant Human TGF beta 1 (Cat.NO. HZ-1011) at 70 ng/well followed by blocking and adding serial diluted TGF beta 1 antibody 69012-1-Ig and 69512-1-Ig respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm.

Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 69012-1-Ig (NeutraKine® TGF beta 1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).