

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

Applications

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

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

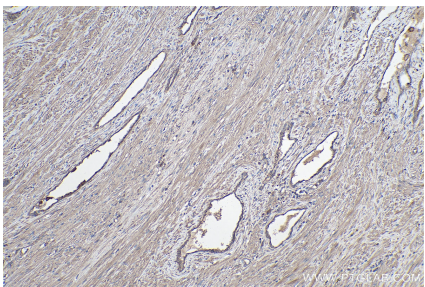
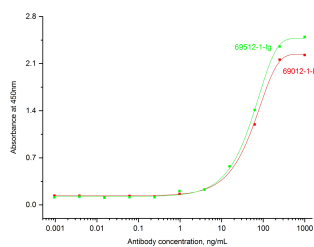
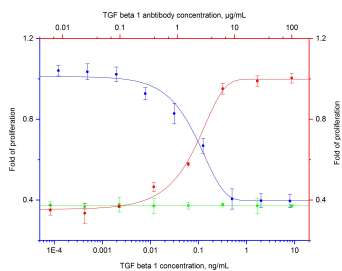
Storage: Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.
Storage Buffer: Sterile PBS, pH7.4
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data

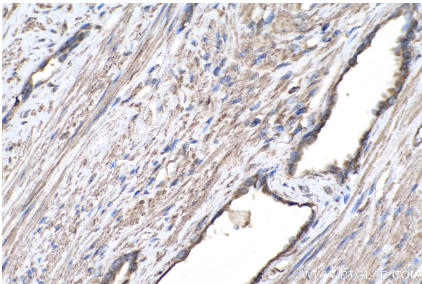


Recombinant human TGF beta 1 (Cat.NO. HZ-1011) inhibits IL-4 induced proliferation of mouse HT-2 cells in a dose dependent manner (blue curve, refer to bottom X-left Y). The activity of human TGF beta 1 (0.5 ng/mL HZ-1011) is neutralized by mouse anti-human TGF beta 1 antibody 69012-1-Ig at serial dose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



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).



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).