

For Research Use Only

NeutraKine® TGF beta 1 Monoclonal antibody



Catalog Number: 69012-1-Ig **4 Publications**

Basic Information

Catalog Number:	69012-1-Ig	GenBank Accession Number:	Purification Method:
Size:		GeneID (NCBI):	Protein A purification
Source:	Mouse	7040	CloneNo.:
Isotype:	IgG1	Full Name:	1E3E9
Immunogen Catalog Number:	HZ-1011	transforming growth factor, beta 1	Recommended Dilutions:
			IHC 1:500-1:2000

Applications

Tested Applications:	Positive Controls:
FC, IHC, Neutralization, ELISA	IHC : human prostate cancer tissue,
Cited Applications:	
Neutralization	
Species Specificity:	
Human	
Cited Species:	
human	
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
Xueya Han	37807066	Stem Cell Res Ther	

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.

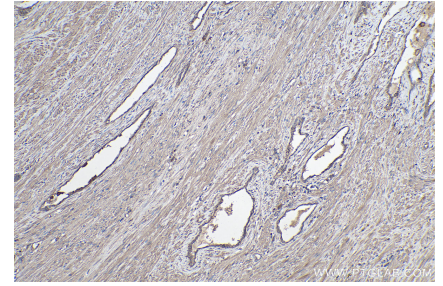
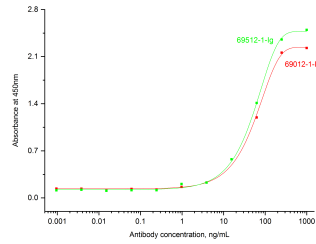
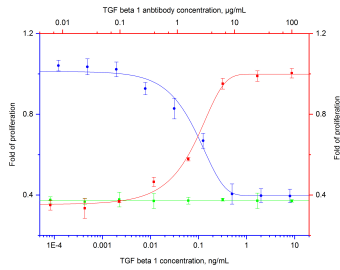
Storage Buffer:
Sterile PBS.

Aliquoting is unnecessary for -20°C storage

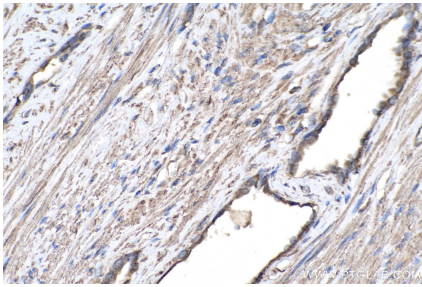
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

Selected Validation Data

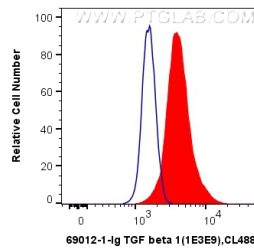


Recombinant human TGF beta 1 (Cat.NO. HZ-1011) inhibits IL-4 induced proliferation of mouse HT-2 cells in a dose dependent manner (blue curve, refer to bottom X-left Y). The activity of human TGF beta 1 (0.5 ng/mL HZ-1011) is neutralized by mouse anti-human TGF beta 1 antibody 69012-1-Ig at serial dose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



1X10⁶ HEK-293 cells were intracellularly stained with 0.4 μ g Anti-Human NeutraKine® TGF beta 1 (69012-1-Ig, Clone:1E3E9) and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 μ g Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).