For Research Use Only

NeutraKine® TGF beta 1 Monoclonal antibody, PBS Only

www.ptglab.com

Purification Method:

CloneNo.:

1E3E9

Protein G purification

Catalog Number:69012-1-PBS

Basic Information

Catalog Number: 69012-1-PBS

Concentration: 1 mg/ml Source:

Mouse Isotype: lgG1

Immunogen Catalog Number:

HZ-1011

GenBank Accession Number:

GeneID (NCBI): 7040

Full Name:

transforming growth factor, beta 1

Calculated MW:

44 kDa

Applications

Tested Applications: IHC, Neutralization, ELISA Species Specificity:

human

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.

Storage

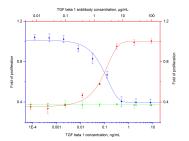
Storage:

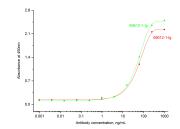
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only, pH7.4

Selected Validation Data



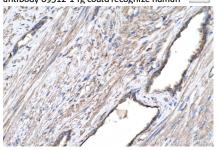




Recombinant human TGF beta 1 (Cat.NO. HZ-1011) inhibits IL-4 induced proliferation of mouse HT-2 cells in a dose dependent nammer (blue curve, refer to bottom X-left Y). The activity of human TGF beta 1 (0.5 ng/mL HZ-1011) is neutralized by mouse anti-human TGF beta 1 antibody 69012-1-lg at serial dose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

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-lg and 69512-1-lg respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm. This data was developed using the same antibody clone with 69012-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 69012-1-1g (NeutraKine® TGF beta 1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 69012-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 69012-1-1g (NeutraKine® TGF beta 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 69012-1-PBS in a different storage buffer formulation.