

NeutraControl TGF beta 1 Monoclonal antibody, PBS Only

Catalog Number: 69512-1-PBS

Basic Information

Catalog Number:	69512-1-PBS	GenBank Accession Number:	Purification Method:
Concentration:	1 mg/ml	GeneID (NCBI):	Protein A purification
Source:	Mouse	7040	CloneNo.:
Isotype:	IgG1	Full Name:	1D3D11
Immunogen Catalog Number:	HZ-1011	transforming growth factor, beta 1	
		Calculated MW:	
		44 kDa	

Applications

Tested Applications:
IF/ICC, ELISA, Non-Neutralization

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).

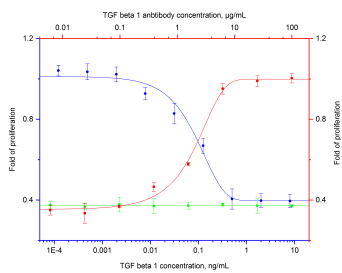
This antibody is a neutralizing control antibody for TGF beta 1, the immunogen is the same as Neutrakine 69012-1-Ig but could not neutralize human TGF beta 1.

Storage

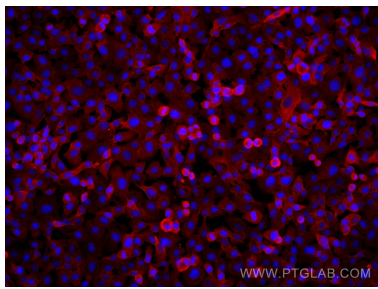
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only, pH7.4

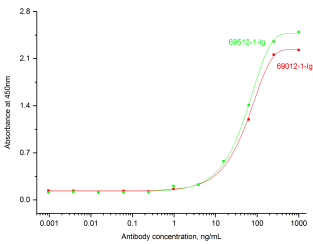
Selected Validation Data



Recombinant human TGF beta 1 (Cat.NO. HZ-1011) inhibits IL-4 induced proliferation of mouse HT-2 cells in a dose dependent 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



Immunofluorescent analysis of (4% PFA) fixed HT-1080 cells using NeutraControl TGF beta 1 antibody (69512-1-Ig, Clone: 1D3D11) at dilution of 1:3963 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 69512-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 69512-1-PBS in a different storage buffer formulation.