

# NeutraControl TGF beta 1 Mouse McAb

Catalog Number: 69512-1-Ig

## Basic Information

<b>Catalog Number:</b> 69512-1-Ig	<b>GenBank Accession Number:</b> GeneID (NCBI): 7040	<b>Purification Method:</b> Protein G purification
<b>Concentration:</b> 1000 µg/ml	<b>Full Name:</b> transforming growth factor, beta 1	<b>CloneNo.:</b> 1D3D11
<b>Source:</b> Mouse	<b>Calculated MW:</b> 44 kDa	<b>Recommended Dilutions:</b> IF/ICC 1:1981-1:7926
<b>Isotype:</b> IgG1		
<b>Immunogen Catalog Number:</b> HZ-1011		

## Applications

<b>Tested Applications:</b> IF/ICC, ELISA, Non-Neutralization	<b>Positive Controls:</b> <b>Non-Neutralization</b> : HT-2 cells, <b>IF/ICC</b> : HT-1080 cells, <b>ELISA</b> : Recombinant protein,
<b>Species Specificity:</b> human	

## Background Information

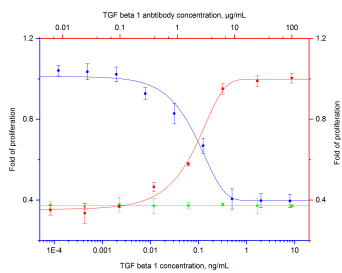
TGFB, also named as LAP and TGFB1, is a multifunctional peptide that controls proliferation, differentiation, and other functions in many cell types. TGFB acts synergistically with TGFA in inducing transformation. It also acts as a negative autocrine growth factor. Dysregulation of TGFB activation and 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.

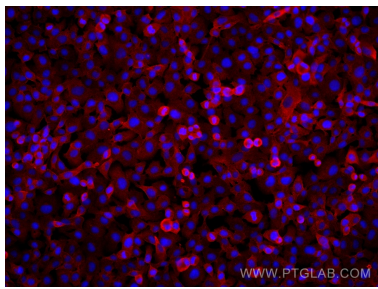
## Storage

**Storage:**  
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

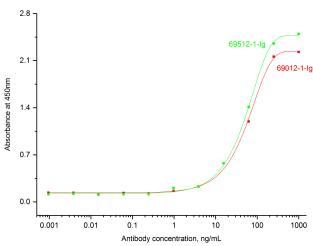
## Selected Validation Data



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 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).



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.