

For Research Use Only

# TGF Beta 1 Polyclonal antibody

Catalog Number: 21898-1-AP

Featured Product

543 Publications



## Basic Information

**Catalog Number:**

21898-1-AP

**Size:**

150ul, Concentration: 600 µg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG13591

**GenBank Accession Number:**

BC000125

**GeneID (NCBI):**

7040

**UNIPROT ID:**

P01137

**Full Name:**

transforming growth factor, beta 1

**Calculated MW:**

44 kDa

**Observed MW:**

44 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:5000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF 1:200-1:800

## Applications

**Tested Applications:**

FC, IF, IP, WB, ELISA

**Cited Applications:**

WB, IP, IHC, IF, ELISA, CoIP, Cell treatment

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rabbit, zebrafish, pig, canine

**Positive Controls:**

WB : mouse skin tissue, K-562 cells, HeLa cells, A549 cells, rat skin tissue

IP : mouse skin tissue,

IF : HEK-293 cells,

## 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 detects the pro-TGF beta 1 and the cleaved fragment Latency-associated peptide.

## Notable Publications

| Author       | Pubmed ID | Journal                 | Application |
|--------------|-----------|-------------------------|-------------|
| Jin-Yun Pu   | 36178578  | Curr Med Sci            | WB          |
| Pengfei Wu   | 32999004  | Cancer Immunol Res      | IHC         |
| Xinmei Huang | 34478541  | J Clin Endocrinol Metab | IHC         |

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

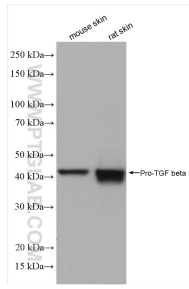
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

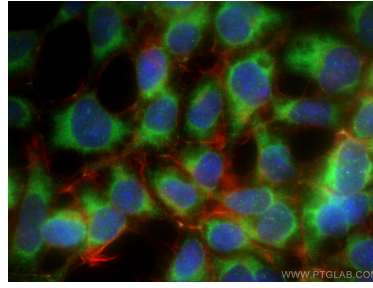
E: proteintech@ptglab.com  
W: ptglab.com

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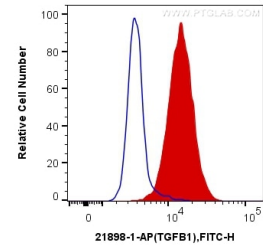
## Selected Validation Data



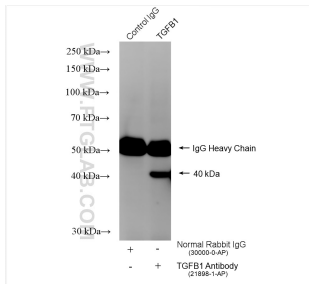
Various lysates were subjected to SDS PAGE followed by western blot with 21898-1-AP (TGF-beta 1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using TGF Beta 1 antibody (21898-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.25 ug Anti-Human TGF Beta 1 (21898-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.25 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



IP result of anti-TGF Beta 1 (IP:21898-1-AP, 4ug; Detection:21898-1-AP 1:6000) with mouse skin tissue lysate 640 ug.