

TGF β 1 (PT0415R) PT® Rabbit mAb

CatalogNo: YM8257 **Recombinant** 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat,

Applications

- WB, IHC, IF, IP, ELISA

MW

- 44kD (Calculated)
- 44kD, 13kD (Observed)

Isotype

- IgG, Kappa

Recommended Dilution Ratios

IHC 1:2000-1:5000**WB 1:1000-1:5000****IF 1:200-1:1000****ELISA 1:5000-1:20000****IP 1:50-1:200**

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Basic Information

Clonality Monoclonal**Clone Number** PT0415R

Immunogen Information

Specificity Endogenous

Target Information

Gene name TGFB1 TGFB

Protein Name Transforming growth factor beta-1 (TGF-beta-1) [Cleaved into: Latency-associated peptide (LAP)]

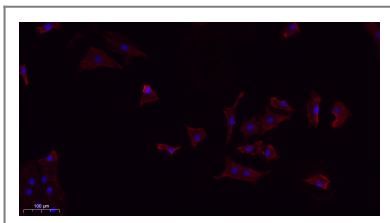
Organism	Gene ID	UniProt ID
Human	7040;	P01137;
Mouse	21803;	P04202;
Rat	59086;	P17246;

Cellular Localization Secreted

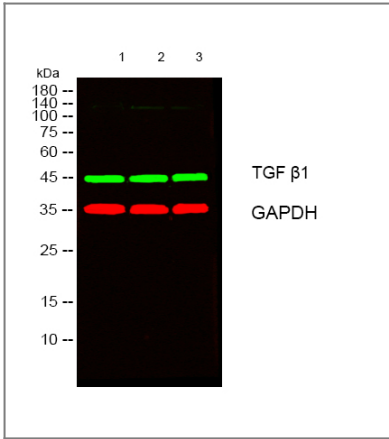
Tissue specificity Highly expressed in bone (PubMed:11746498, PubMed:17827158). Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA) (PubMed:11746498, PubMed:17827158). Colocalizes with ASPN in chondrocytes within OA lesions of articular cartilage (PubMed:17827158).

Function Disease:Defects in TGFB1 are the cause of Camurati-Engelmann disease (CED) [MIM:131300]; also known as progressive diaphyseal dysplasia 1 (DPD1). CED is an autosomal dominant disorder characterized by hyperostosis and sclerosis of the diaphyses of long bones. The disease typically presents in early childhood with pain, muscular weakness and waddling gait, and in some cases other features such as exophthalmos, facial paralysis, hearing difficulties and loss of vision.,Function:Multifunctional protein that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGFB1 and have specific receptors for it. It 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.,induction:Activated in vitro at pH below 3.5 and over 12.5.,online information:TGF beta-1 entry,polymorphism:In post-menopausal Japanese women, the frequency of Leu-10 is higher in subjects with osteoporosis than in controls.,PTM:Glycosylated.,PTM:The precursor is cleaved into mature TGF-beta-1 and LAP, which remains non-covalently linked to mature TGF-beta-1 rendering it inactive.,similarity:Belongs to the TGF-beta family.,subunit:The inactive form consists of a TGFB1 homodimer non-covalently linked to a latency-associated peptide (LAP) homodimer. The inactive complex can contain a latent TGFB1-binding protein. The active form is a homodimer of mature TGFB1; disulfide-linked. Heterodimers of TGFB1/TGFB2 have been found in bone. Interacts with CD109 and DPT.,tissue specificity:Highly expressed in bone.,

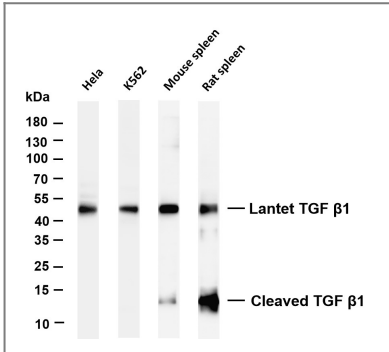
Validation Data



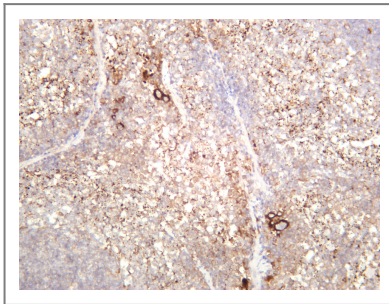
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



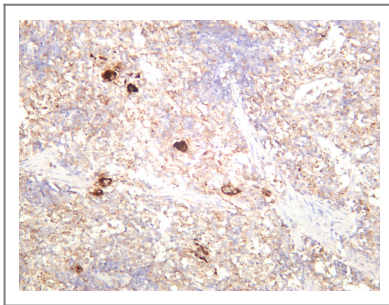
Western blot analysis of lysates from 1) Mouse Brain, 2) HT29, 3) HepG2 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody (cat:RS23920) was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody (2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody (cat:RS23710) was diluted at 1:10000, 37° 1hour.



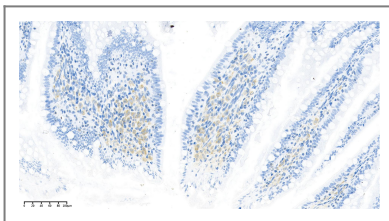
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TGF beta 1 (PT0415R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: K562 Lane 3: Mouse spleen Lane 4: Rat spleen Predicted band size: 44kDa Observed band size: 44,13kDa



Mouse spleen was stained with anti-TGF beta 1 (PT0415R) rabbit antibody



Rat spleen was stained with anti-TGF beta 1 (PT0415R) rabbit antibody



Rat jejunum was stained with anti-TGF beta 1 (PT0415R) Rabbit antibody

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Please scan the QR code
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