

TGFβ1 Polyclonal Antibody

Catalog No: YT4632

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: TGFB1

Fields: >>MAPK signaling pathway;>>Cytokine-cytokine receptor interaction;>>FoxO

signaling pathway;>>Cell cycle;>>Cellular senescence;>>TGF-beta signaling pathway;>>Osteoclast differentiation;>>Hippo signaling pathway;>>Th17 cell differentiation;>>Intestinal immune network for IgA production;>>Relaxin signaling pathway;>>Non-alcoholic fatty liver disease;>>AGE-RAGE signaling

pathway in diabetic complications;>>Leishmaniasis;>>Chagas

disease;>>Malaria;>>Toxoplasmosis;>>Amoebiasis;>>Tuberculosis;>>Hepatitis

B;>>Human T-cell leukemia virus 1 infection;>>Pathways in

cancer;>>Proteoglycans in cancer;>>Colorectal cancer;>>Renal cell

carcinoma;>>Pancreatic cancer;>>Chronic myeloid leukemia;>>Hepatocellular carcinoma;>>Gastric cancer;>>Inflammatory bowel disease;>>Rheumatoid arthritis;>>Hypertrophic cardiomyopathy;>>Dilated cardiomyopathy;>>Diabetic

cardiomyopathy

Gene Name: TGFB1 TGFB

Protein Name: Transforming growth factor beta-1, TGF-β1, TGF b

Human Gene Id: 7040

Human Swiss Prot

P01137

No:

Mouse Gene ld: 21803

Mouse Swiss Prot

P04202

No:

Rat Gene ld: 59086

Rat Swiss Prot No: P17246

Immunogen: The antiserum was produced against synthesized peptide derived from human



TGF beta1. AA range:336-385

Specificity: TGFβ1 Polyclonal Antibody detects endogenous levels of TGFβ1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 44-55kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;Cytokine-cytokine receptor

interaction; Cell_Cycle_G1S; Cell_Cycle_G2M_DNA; TGF-beta; Intestinal immune

network for IgA production;Pathways in cancer;Colorectal cancer;Renal

Background: This gene encodes a secreted ligand of the TGF-beta (transforming growth

factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription

factors that regulate gene expression. The encoded preproprotein is

proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGFB family members. This

encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon

gamma and tumor necrosis factor alpha. This gene i

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

2/3



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 osteob

Subcellular Location :

[Latency-associated peptide]: Secreted, extracellular space, extracellular matrix .; [Transforming growth factor beta-1]: Secreted .

Expression:

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).

Sort:

- 1

No3:

ab215715

No4:

- 1

Host:

Rabbit

Modifications:

Unmodified

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