

TGF β 1 (PT2173) Mouse mAb

Catalog No :	YM4305
Reactivity :	Human; Mouse (predicted: Rat)
Applications :	WB;IHC;ELISA
Target :	LAP
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-beta-1) [Cleaved into: Latency- associated peptide (LAP)]
Human Gene Id :	7040
Human Swiss Prot	P01137
Mouse Gene Id :	21803
Mouse Swiss Prot	P04202
No : Rat Gene Id :	59086
Rat Swiss Prot No :	P17246



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Immunogen :	Synthesized peptide derived from human TGF β1 AA range: 300-390	
Specificity :	This antibody detects endogenous levels of TGF β 1 at Human, Mouse,Rat	
Formulation :	PBS, pH7.4, 50% glycerol, 0.03%Proclin 300	
Source :	Mouse,monoclonal:IgG2b, Kappa	
Dilution :	WB 1:500-2000 IHC 1:100-300 ELISA 1:5000-20000	
Purification :	Protein G	
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)	
Observed Band :	44kDa	
Background :	transforming growth factor beta 1(TGFB1) Homo sapiens 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 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).
Tag :	hot
Sort :	1
No4 :	1
Host :	Mouse
Modifications :	Unmodified



Products Images

Whole cell lysates of K562 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-TGF β 1(PT2173) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Predicted band size: 44kDa Observed band size: 44kDa