Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858

Summary

Production Name	TGFβ1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	TGFB1 TGFB
Alternative Names	TGFB1; TGFB; Transforming growth factor beta-1; TGF-beta-1
Gene ID	7040.0
SwissProt ID	P01137.The antiserum was produced against synthesized peptide derived from human TGF beta1. AA range:336-385

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC-p: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet tested in other applications.
Molecular Weight	44-55kD

Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858

Background

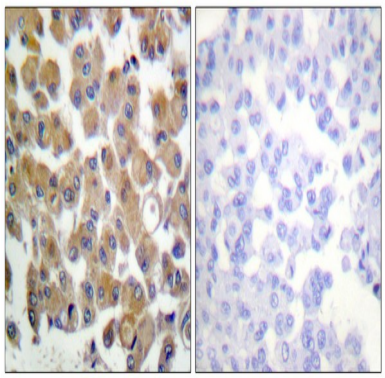
This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is 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 idisease: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.,

Research Area

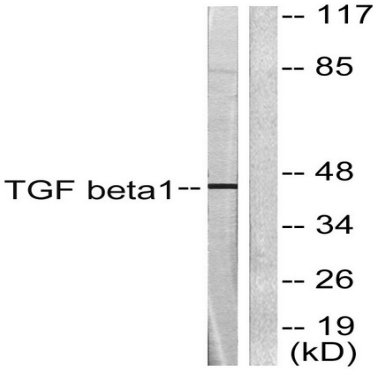
MAPK_ERK_Growth;MAPK_G_Protein;Cytokine-cytokine receptor interaction;Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;TGF-beta;Intestinal immune network for IgA production;Pathways in cancer;Colorectal cancer;Renal cell carcinoma;Pancreatic cancer;Chronic myeloid leukemia;Hypertrophic cardiomyopathy (HCM);Dilated cardiomyopathy;

Image Data

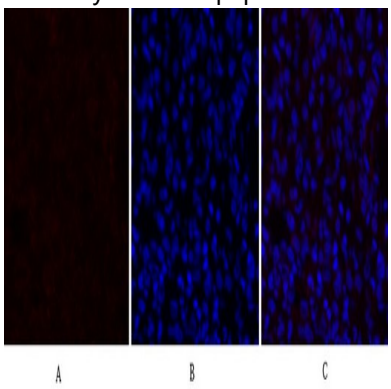
Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using TGF beta1 Antibody. The picture on the right is blocked with the synthesized peptide.

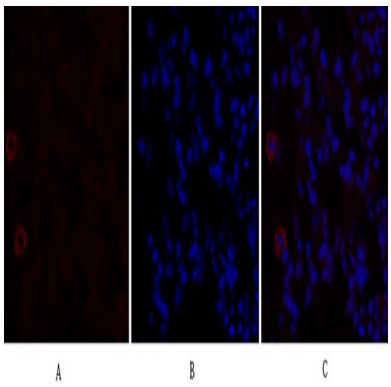


Western blot analysis of lysates from HepG2 cells, using TGF beta1 Antibody. The lane on the right is blocked with the synthesized peptide.

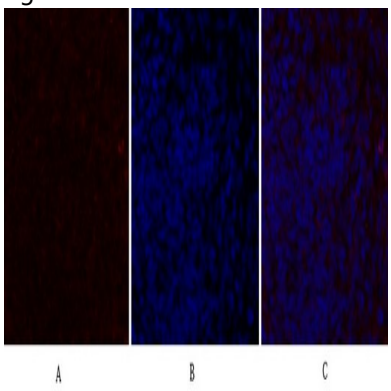


Immunofluorescence analysis of rat-lung tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

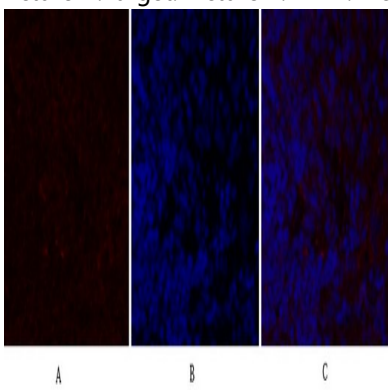
Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858



Immunofluorescence analysis of rat-lung tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

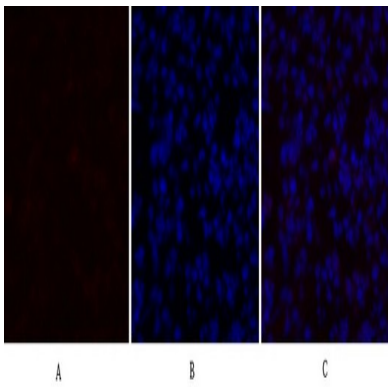


Immunofluorescence analysis of rat-spleen tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

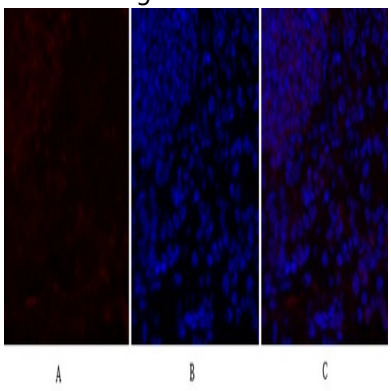


Immunofluorescence analysis of rat-spleen tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

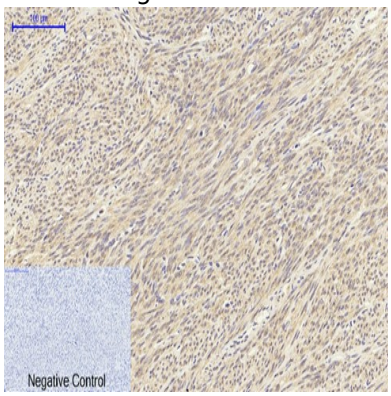
Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858



Immunofluorescence analysis of mouse-lung tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of mouse-lung tissue. 1,TGFβ1 Polyclonal Antibody（red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,TGFβ1 Polyclonal Antibody was diluted at 1:200（4°C,overnight）. 2, Sodium citrate pH 6.0 was used for antibody retrieval（>98°C,20min）. 3,Secondary antibody was diluted at 1:200（room tempeRature, 30min）. Negative control was used by secondary antibody only.

Product Name: TGFβ1 Rabbit Polyclonal Antibody
Catalog #: APRab18858

Note

For research use only.