

For Research Use Only

TGF Beta 1 Recombinant antibody, PBS Only

Catalog Number: 81746-2-PBS



Basic Information

Catalog Number: 81746-2-PBS	GenBank Accession Number: BC000125	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7040	CloneNo.: 230544B7
Source: Rabbit	UNIPROT ID: P01137	
Isotype: IgG	Full Name: transforming growth factor, beta 1	
Immunogen Catalog Number: AG13591	Calculated MW: 44 kDa	
	Observed MW: 44 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:
human, mouse

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). Full-length, inactive 44 kD TGFB1 is cleaved into mature TGFB1 (13 kD). TGFB1 also homodimerizes and heterodimerizes with TGFB2, so there is potential for multiple different band sizes in WB (12, 25, 45 to 65 kDa).

Storage

Storage:
Store at -80°C.

Storage Buffer:
PBS Only

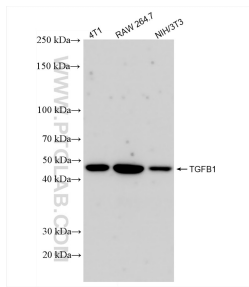
For technical support and original validation data for this product please contact:

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

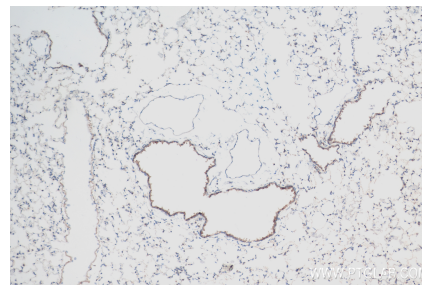
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

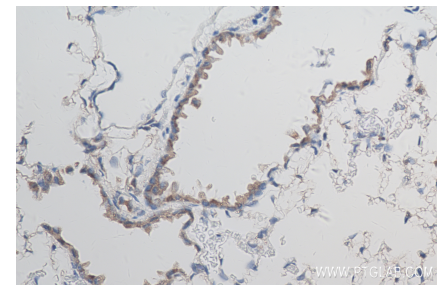
Selected Validation Data



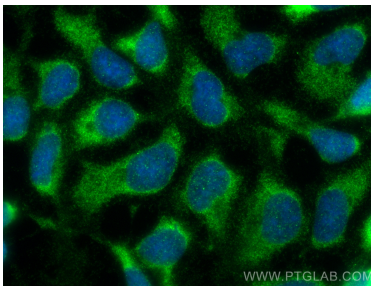
Various lysates were subjected to SDS PAGE followed by western blot with 81746-2-RR (TGFβ1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81746-2-PBS in a different storage buffer formulation.



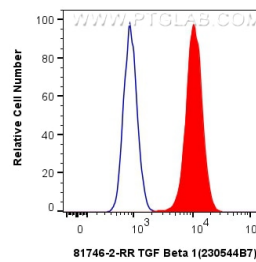
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGF Beta 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81746-2-PBS in a different storage buffer formulation.



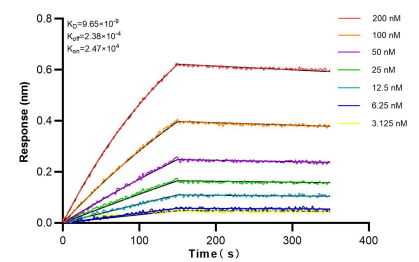
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGF Beta 1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81746-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using TGFβ1 antibody (81746-2-RR, Clone: 230544B7) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). This data was developed using the same antibody clone with 81746-2-PBS in a different storage buffer formulation.



1×10^6 HEK-293 cells were intracellularly stained with 0.25 μ g TGF Beta 1 Recombinant antibody (81746-2-RR, Clone:230544B7) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 μ g Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 81746-2-PBS in a



Bi-layer interferometry (BLI) kinetic assays of 81746-2-RR against Human TGFβ1 were performed. The affinity constant is 9.65 nM.