

For Research Use Only

TGF Beta 1 Recombinant antibody

Catalog Number: 81746-2-RR **4 Publications**



Basic Information

Catalog Number:	81746-2-RR	GenBank Accession Number:	BC000125	Purification Method:	Protein A purification
Size:	100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI):	7040	CloneNo.:	23054487
Source:	Rabbit	UNIPROT ID:	P01137	Recommended Dilutions:	WB 1:5000-1:50000 IHC 1:50-1:500 IF/ICC 1:50-1:500
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), ELISA	Positive Controls:	
Cited Applications:	WB, IHC	WB :	4T1 cells, K-562 cells, L-929 cells, RAW 264.7 cells, mouse spleen tissue
Species Specificity:	human, mouse	IHC :	mouse lung tissue,
Cited Species:	mouse, rat, rabbit	IF/ICC :	HEK-293 cells,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0			

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).

Notable Publications

Author	Pubmed ID	Journal	Application
Helin Wu	39609858	J Orthop Surg Res	IHC
Wei Meng	39549880	Free Radic Biol Med	WB
Chunfang Xu	39528116	J Ethnopharmacol	WB,IHC

Storage

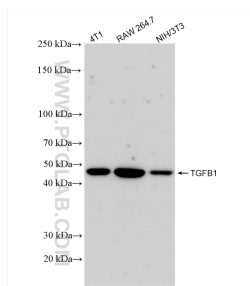
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

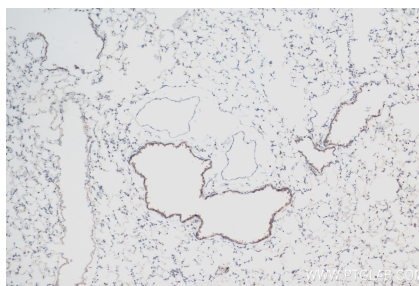
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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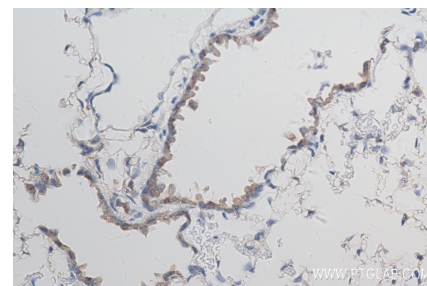
Selected Validation Data



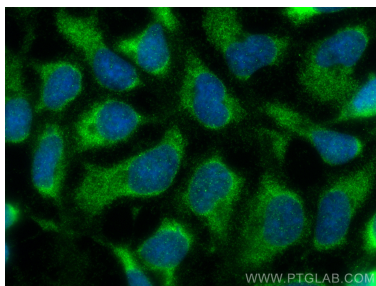
Various lysates were subjected to SDS PAGE followed by western blot with 81746-2-RR (TGFβ1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



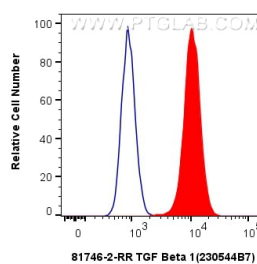
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGFβ1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



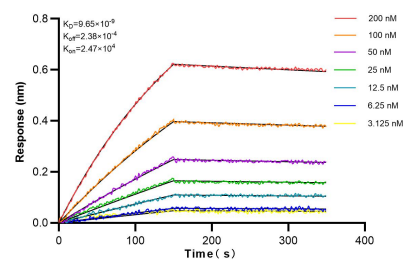
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGFβ1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1x10⁶ HEK-293 cells were intracellularly stained with 0.25 μg TGFβ1 Recombinant antibody (81746-2-RR, Clone:230544B7) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 μg 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).



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