

For Research Use Only

TGF Beta 1 Recombinant monoclonal antibody

Catalog Number: 81746-2-RR

Featured Product

19 Publications



Basic Information

Catalog Number:

81746-2-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG13591

GenBank Accession Number:

BC000125

GeneID (NCBI):

7040

UNIPROT ID:

P01137

Full Name:

transforming growth factor, beta 1

Calculated MW:

44 kDa

Observed MW:

44 kDa

Purification Method:

Protein A purification

CloneNo.:

230544B7

Recommended Dilutions:

WB: 1:2000-1:12000

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, rabbit

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: 4T1 cells, HepG2 cells, K-562 cells, L-929 cells, RAW 264.7 cells, A549 cells, HL-60 cells, C6 cells, mouse spleen tissue, rat spleen tissue

IHC: mouse lung tissue,

IF/ICC: HEK-293 cells,

FC (Intra): HEK-293 cells,

Background Information

TGF Beta 1 (TGF- β 1) is a pleiotropic cytokine and a member of the TGF- β superfamily (including TGF- β 1, TGF- β 2, and TGF- β 3). It is encoded by the TGF β 1 gene and acts as a secreted protein involved in controlling cell growth, proliferation, differentiation, and apoptosis. TGF- β 1 is produced by various cell types (e.g., platelets, lymphocytes, macrophages, epithelial cells, and inflammatory cells) and is secreted as a precursor requiring proteolytic activation to yield the mature, biologically active peptide. TGF- β 1 plays crucial roles in immune regulation, wound healing, fibrosis, and tissue remodeling (including cardiac injury and fibrosis). It also influences cancer progression by promoting epithelial-to-mesenchymal transition (EMT) and metastasis in tumors.

Notable Publications

Author	Pubmed ID	Journal	Application
Mengning Zheng	40498253	Immunol Res	WB
Wende Hao	40505846	Cell Signal	WB
Yipeng Pang	40513180	Redox Biol	WB

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

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

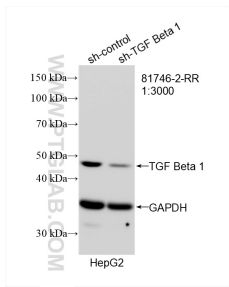
T: 4006900926

E: Proteintech-CN@ptglab.com

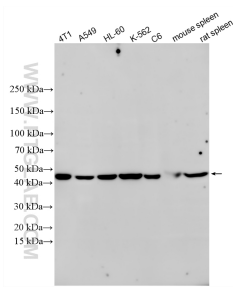
W: ptgcn.com

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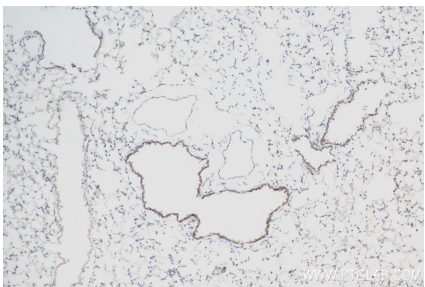
Selected Validation Data



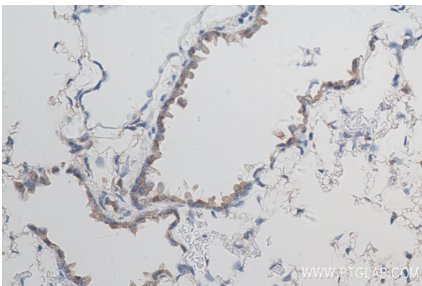
WB result of TGF Beta 1 antibody (81746-2-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TGF Beta 1 transfected HepG2 cells.



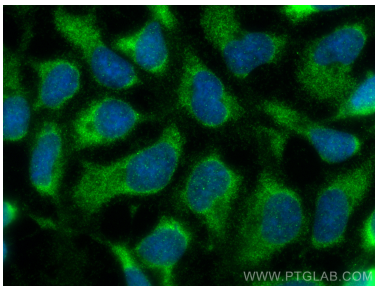
Various lysates were subjected to SDS PAGE followed by western blot with 81746-2-RR (TGF Beta 1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



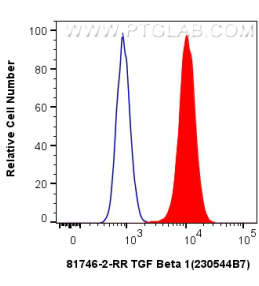
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGF Beta 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



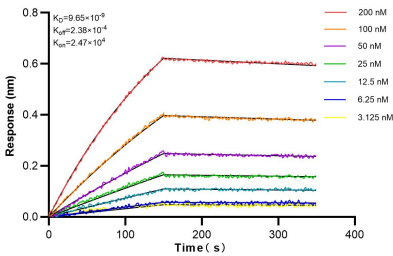
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 81746-2-RR (TGF Beta 1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using TGF Beta 1 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 ug 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 ug 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.



Biolayer interferometry (BLI) kinetic assays of 81746-2-RR against Human TGF Beta 1 were performed. The affinity constant is 9.65 nM.