

For Research Use Only

# TGFBR1 Recombinant antibody

Catalog Number: 84453-1-RR



## Basic Information

<b>Catalog Number:</b> 84453-1-RR	<b>GenBank Accession Number:</b> NM_004612	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7046	<b>CloneNo.:</b> 241441A11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P36897	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> transforming growth factor, beta receptor 1	
<b>Immunogen Catalog Number:</b> AG31620	<b>Calculated MW:</b> 56KD	
	<b>Observed MW:</b> 56 kDa	

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human

**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 :** NCI-H1299 cells, MDA-MB-231 cells, A549 cells

**IHC :** human lung cancer tissue, human placenta tissue

## Background Information

TGFBR1 (TGF-beta receptor type-1) encodes a serine/threonine kinase receptor for transforming growth factor-beta. TGFBR1, TGFBR2 and TGFBR3 signals are transduced from the cell surface to the cytoplasm and regulate lots of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. Mutations in both TGFBR2 and TGFBR1 were associated with early onset and aggressive thoracic aortic disease with MFS-like skeletal features, but also hypertelorism, craniosynostosis, developmental delay, cleft palate and bifid uvula, congenital heart disease and aneurysms, and dissections throughout the arterial tree with marked arterial tortuosity (PMID: 15731757, PMID: 27879313).

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

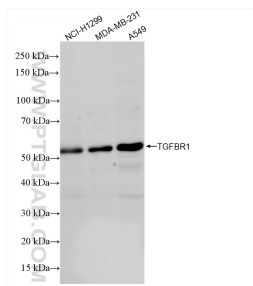
For technical support and original validation data for this product please contact:

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

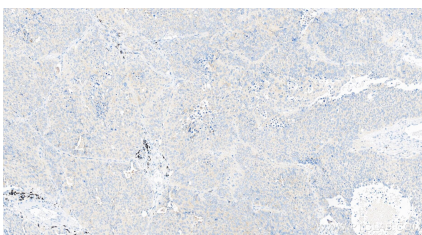
E: proteintech@ptglab.com  
W: ptglab.com

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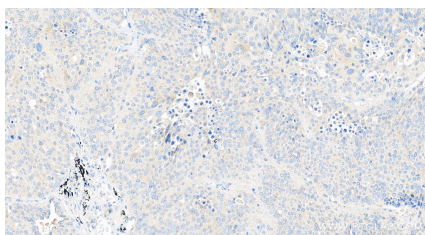
## Selected Validation Data



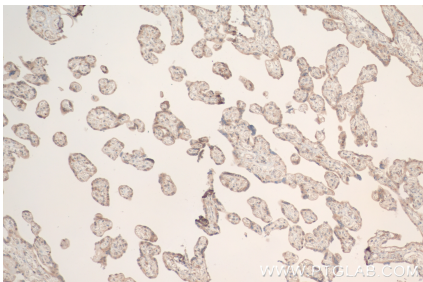
Various lysates were subjected to SDS PAGE followed by western blot with 84453-1-RR (TGFBR1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



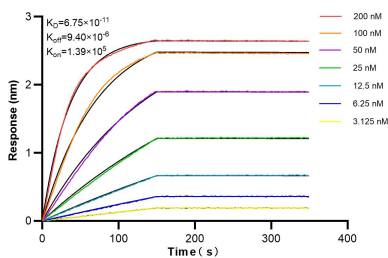
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 84453-1-RR (TGFBR1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 84453-1-RR (TGFBR1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 84453-1-RR (TGFBR1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84453-1-RR against Human TGFBR1 were performed. The affinity constant is 67.5 pM.