

For Research Use Only

# TGF beta 1 Recombinant monoclonal antibody

Catalog Number: 80458-2-RR



## Basic Information

<b>Catalog Number:</b> 80458-2-RR	<b>GenBank Accession Number:</b> NM-011577	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 21803	<b>CloneNo.:</b> 250513C9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P04202	<b>Recommended Dilutions:</b> WB: 1:5000-1:20000 IF/ICC: 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> transforming growth factor, beta 1	
<b>Immunogen Catalog Number:</b> EG3734	<b>Observed MW:</b> 48 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b> WB : K-562 cells, NIH/3T3 cells, RAW 264.7 cells, mouse spleen tissue
<b>Species Specificity:</b> human, mouse	<b>IF/ICC :</b> NIH/3T3 cells,

## Background Information

TGF beta 1 is a potent cytokine capable of regulating multiple cellular processes including cell proliferation, differentiation, wound healing, and immune response. TGF beta 1 is identified in various immune cells and its activity varies in different cell types or cells at different developmental stages. TGF beta 1 functions by binding to the TGFβ1 receptors, which subsequently activate the canonical SMAD pathway or non-canonical signaling cascades, such as the mitogen-activated protein kinase (MAPK) pathway, phosphatidylinositol-3 kinase and AKT (PI3K-AKT), and Rho family of GTPases (Rho GTPase). What is special about TGF beta 1 is its context-dependent nature that is particularly true for tumors. Full-length, inactive 44 kD TGFβ1 is cleaved into mature TGFβ1 (13 kD). TGFβ1 also homodimerizes and heterodimerizes with TGFβ2, so there is potential for multiple different band sizes in WB (12, 25, 45 to 65 kDa).

## 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

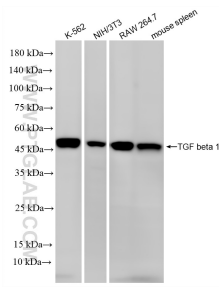
For technical support and original validation data for this product please contact:

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

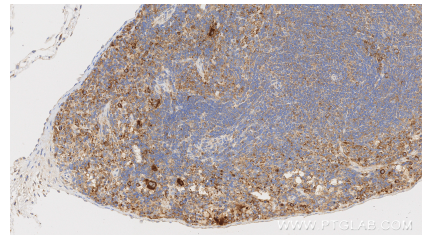
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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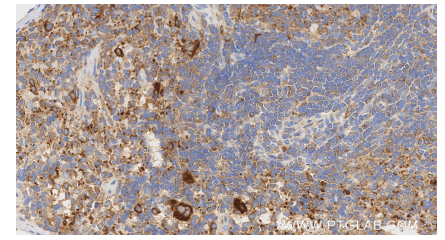
## Selected Validation Data



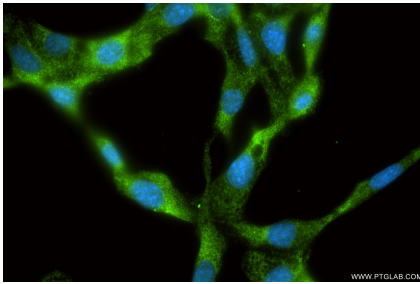
Various lysates were subjected to SDS PAGE followed by western blot with 80458-2-RR (Tgfb1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 80458-2-RR (TGF beta 1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 80458-2-RR (TGF beta 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using TGF beta 1 antibody (80458-2-RR, Clone: 250513C9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).