

For Research Use Only

# TGF beta 1 Recombinant monoclonal antibody

Catalog Number: 80458-2-RR



## Basic Information

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

## Applications

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| <b>Tested Applications:</b><br>WB, IF/ICC, ELISA | <b>Positive Controls:</b>  |
| <b>Species Specificity:</b><br>human, mouse      | <b>WB :</b> K-562 cells, NIH/3T3 cells, RAW 264.7 cells, mouse spleen tissue |
|  | <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<sup>1</sup>. TGF beta 1 functions by binding to the TGF β 1 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 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 -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:

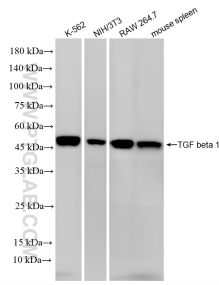
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

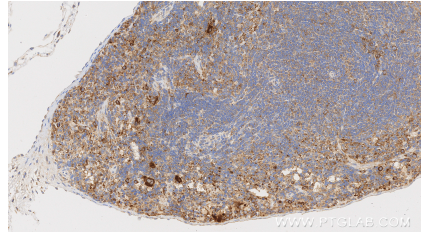
W: [ptgcn.com](http://ptgcn.com)

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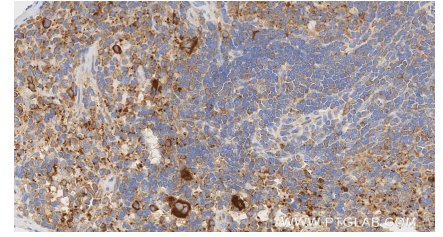
## Selected Validation Data



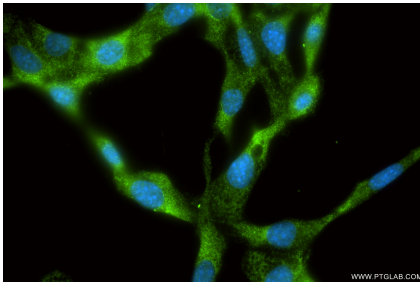
Various lysates were subjected to SDS PAGE followed by western blot with 80458-2-RR (Tgfb1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



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).