

For Research Use Only

# TGF Beta 1 Polyclonal antibody

Catalog Number: 18978-1-AP **110 Publications**



## Basic Information

<b>Catalog Number:</b> 18978-1-AP	<b>GenBank Accession Number:</b> NM_000660	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 220 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 7040	<b>Recommended Dilutions:</b> WB: 1:200-1:1000 IHC: 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P01137	
<b>Isotype:</b> IgG	<b>Full Name:</b> transforming growth factor, beta 1	
	<b>Calculated MW:</b> 44 kDa	
	<b>Observed MW:</b> 25 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b> WB : MCF-7 cells, IHC : human lung cancer tissue,
<b>Cited Applications:</b> WB, IHC, IF, Cell treatment	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse, rat, pig, canine, monkey, bovine, sheep	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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
Fang Dou	30215298	Rejuvenation Res	WB
Xin Liang	28850927	Biomed Pharmacother	WB
Haoyu Ruan	27581744	Sci Rep	IHC

## Storage

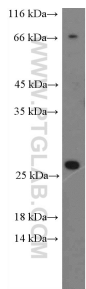
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

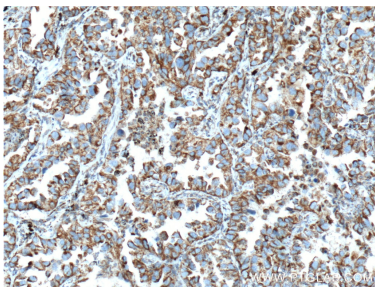
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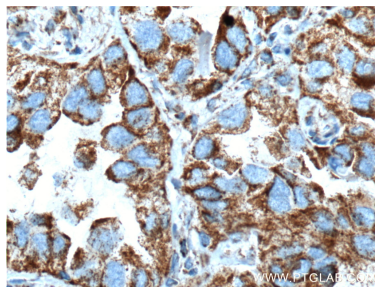
## Selected Validation Data



MCF-7 cells were subjected to SDS PAGE followed by western blot with 18978-1-AP (TGF-beta 1 antibody at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18978-1-AP (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 human lung cancer tissue slide using 18978-1-AP (TGF-beta 1 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).