TGF-beta 1 Polyclonal ANTIBODY
Catalog Number: 18978-1-AP

Basic Information
Catalog Number: 18978-1-AP
GenBank Accession Number: NM_000660
Recommended Dilutions:
WB: 1:200-1:1000
IHC: 1:50-1:500
Size: 33 μg/150 μl
Source: Rabbit
Purification Method: Antigen affinity purification
Immunogen Catalog Number:
Genetic ID (NCBI): 7040
Gene Name: transforming growth factor, beta 1
Full Name: transform growth factor, beta 1
Calculated MW: 44 kDa
Observed MW: 25 kDa

Applications
Tested Applications: IHC, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat
Cited Species: buffalo, dog, human, miniping, mouse, pig, rat, sheep

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

Background Information
TGFβ, also named as LAP and TGFB1, is a multifunctional peptide that controls proliferation, differentiation, and other functions in many cell types. TGFβ acts synergistically with TGFα in inducing transformation. It also acts as a negative autocrine growth factor. Dysregulation of TGFβ activation and signaling may result in apoptosis. Many cells synthesize TGFβ and almost all of them have specific receptors for it. TGFβ positively and negatively regulates many other growth factors. It plays an important role in bone remodeling as it is a potent stimulator of osteoelastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts. It is highly expressed in bone. Mutation of TGFβ are the cause of Camurati-Engelmann disease (CED) which known as progressive diaphyseal dysplasia 1 (DPD1). 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).

Notable Publications
Author | Pubmed ID | Journal | Application
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Fang Dou | 30215298 | Rejuvenation Res | WB
Haoyu Ruan | 27581744 | Sci Rep | IHC
Zhihao Zhang | 27802903 | Biomed Pharmacother | WB

Storage
Store at -20°C. Stable for one year after shipment.
Storage Buffer: PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage.

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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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)
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50 Publications
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 retrieved with Tris-EDTA buffer (pH 9).

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 retrieved with Tris-EDTA buffer (pH 9).