

# TGFB1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12348A

# **Product Information**

Application	WB, E
Primary Accession	<u>P01137</u>
Other Accession	<u>P17246, P07200, P04202, P18341, NP_000651.3</u>
Reactivity	Human, Rat, Mouse
Predicted	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20803
Calculated MW	44325
Antigen Region	30-50

#### **Additional Information**

Gene ID	7040
Other Names	Transforming growth factor beta-1, TGF-beta-1, Latency-associated peptide, LAP, TGFB1, TGFB
Target/Specificity	This TGFB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-50 amino acids of human TGFB1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TGFB1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	TGFB1 ( <u>HGNC:11766</u> )
Synonyms	TGFB
Function	Transforming growth factor beta-1 proprotein: Precursor of the

	Latency-associated peptide (LAP) and Transforming growth factor beta-1 (TGF-beta-1) chains, which constitute the regulatory and active subunit of TGF-beta-1, respectively.
Cellular Location	[Latency-associated peptide]: Secreted, extracellular space, extracellular matrix
Tissue Location	Highly expressed in bone (PubMed:11746498, PubMed:17827158). Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA) (PubMed:11746498, PubMed:17827158). Colocalizes with ASPN in chondrocytes within OA lesions of articular cartilage (PubMed:17827158)

# Background

TGFB1 is a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types. Many cells have TGFB receptors, and the protein positively and negatively regulates many other growth factors. The secreted protein is cleaved into a latency-associated peptide (LAP) and a mature TGFB1 peptide, and is found in either a latent form composed of a TGFB1 homodimer, a LAP homodimer, and a latent TGFB1-binding protein, or in an active form composed of a TGFB1 homodimer. The mature peptide may also form heterodimers with other TGFB family members. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease.

# References

Perez, A.B., et al. Hum. Immunol. 71(11):1135-1140(2010) Xu, Z., et al. Biochem. Biophys. Res. Commun. 401(3):376-381(2010) Bran, G.M., et al. Anticancer Res. 30(9):3459-3463(2010) Zauli, G., et al. Blood 80(12):3036-3043(1992) Wrana, J.L., et al. Cell 71(6):1003-1014(1992)

#### Images



All lanes : Anti-TGFB1 Antibody (N-term) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### Citations

- Identification and analysis of key genes associated with ulcerative colitis based on DNA microarray data.
- <u>CTGF siRNA ameliorates tubular cell apoptosis and tubulointerstitial fibrosis in obstructed mouse kidneys in a</u> <u>Sirt1-independent manner.</u>

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