

**Anti-TGF beta 1 (RABBIT) Antibody**  
**TGF beta 1 Antibody**  
**Catalog # ASR5224****Specification**

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**Anti-TGF beta 1 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	Anti-TGF beta 1 Antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 12.5 kDa in size corresponding to reduced mature TGFb1 by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	TGF beta 1 Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the amino terminus of the mature growth factor (112 amino acids in length).
Preservative	0.01% (w/v) Sodium Azide

**Anti-TGF beta 1 (RABBIT) Antibody - Additional Information****Gene ID** 7040**Other Names**  
7040**Purity**

Rabbit Anti-TGF beta 1 affinity purified antibody is directed against human TGFb1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest reactivity with this protein from most mammalian sources based on 100% homology for the immunogen sequence. Cross-reactivity is expected with TGFb1 from non-mammalian sources as only a single amino acid residue change is found within the immunogen sequence from many other organisms.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

#### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### Anti-TGF beta 1 (RABBIT) Antibody - Protein Information

**Name** TGFB1 ([HGNC:11766](#))

**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

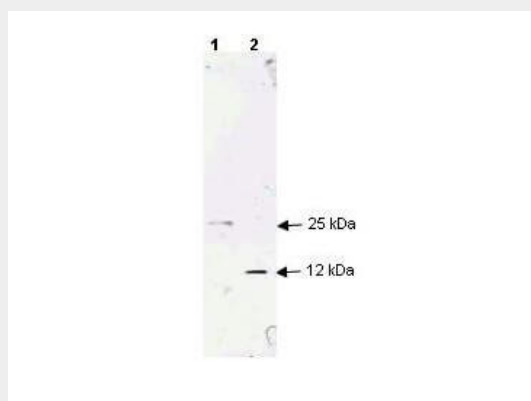
Highly expressed in bone (PubMed:11746498, PubMed:17827158). Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA) (PubMed:11746498, PubMed:17827158). Colocalizes with ASPN in chondrocytes within OA lesions of articular cartilage (PubMed:17827158)

### Anti-TGF beta 1 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-TGF beta 1 (RABBIT) Antibody - Images



Western blot analysis using Rockland's Affinity Purified anti-TGF beta 1 antibody to detect human TGF beta 1. Each lane contains 250 ng of protein under non-reducing (lane 1) and reducing conditions (lane 2). Comparison to molecular weight markers (not shown) was used to estimate the indicated molecular weights. The blot was incubated with a 1:200 dilution of the antibody at room temperature for 1 h followed by detection using IRDye® 800 labeled Goat-a-Rabbit IgG (H&L) (611-132-122) diluted 1:2,500. IRDye® 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

#### **Anti-TGF beta 1 (RABBIT) Antibody - Background**

TGF-beta-1 is a multifunctional cytokine that belongs to a superfamily of structurally related regulatory proteins, including three mammalian TGF-beta isoforms (TGF-beta-1, -beta-2, and -beta-3), activin/inhibins and bone morphogenetic proteins. The most abundant isoform, TGF-beta-1, is a 25kDa homodimer composed of two 12.5 kDa subunits joined by disulfide bonds. TGF-beta-1 is a highly conserved molecule; the amino acid sequence between human and mouse differs by only one residue. Although originally defined by its ability to cause anchorage independent cell growth and changes in cell morphology of rat fibroblasts, subsequent research has revealed that TGF-beta is actually a major growth inhibitor for most cell types. It is produced by a wide variety of cell and tissue types during all stages of cell differentiation. TGF-beta-1 sources include platelets, bone and soft tissues, such as placenta and kidneys.