

Product datasheet

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ARG42044 anti-TGF beta 1 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes TGF beta 1

Tested Reactivity Hu, Ms
Predict Reactivity Rat

Tested Application IHC-P, WB
Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name TGF beta 1
Species Human

Conjugation Un-conjugated

Alternate Names TGFB; DPD1; TGFbeta; CED; Transforming growth factor beta-1; LAP; TGF-beta-1

Application Instructions

Application table	Application	Dilution	
	IHC-P	1:100	
	WB	1:500 - 1:1000	
Application Note		* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 42 - 48 kDa		

Properties

Form Liquid

Purification Affinity purified.

Buffer 100 mM Tris Glycine (pH 7.0), 0.025% ProClin 300, 20% Glycerol and 1% BSA.

Preservative 0.025% ProClin 300

Stabilizer 20% Glycerol and 1% BSA

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

TGFB1

Gene Full Name

transforming growth factor, beta 1

Background

This gene encodes 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.[provided by RefSeq, Oct 2009]

Function

Multifunctional protein that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGFB1 and have specific receptors for it. It 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. Can promote either T-helper 17 cells (Th17) or regulatory T-cells (Treg) lineage differentiation in a concentration-dependent manner. At high concentrations, leads to FOXP3-mediated suppression of RORC and down-regulation of IL-17 expression, favoring Treg cell development. At low concentrations in concert with IL-6 and IL-21, leads to expression of the IL-17 and IL-23 receptors, favoring differentiation to Th17 cells. [UniProt]

Calculated Mw

44 kDa

PTM

Glycosylated.

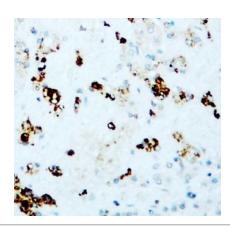
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The precursor is cleaved into mature TGF-beta-1 and LAP, which remains non-covalently linked to mature TGF-beta-1 rendering it inactive. [UniProt]

Cellular Localization

Secreted, extracellular space, extracellular matrix. [UniProt]

Images



ARG42044 anti-TGF beta 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue stained with ARG42044 anti-TGF beta 1 antibody at 1:100 dilution.



TGF beta 1 transfected 293T

ARG42044 anti-TGF beta 1 antibody WB image

Western blot: 293T cells transfected with TGF beta 1. 60 μg of cell lysates stained with ARG42044 anti-TGF beta 1 antibody at 1:800 dilution, overnight at 4°C.