

## ARG42581 anti-TGF beta 2 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes TGF beta 2
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TGF beta 2
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence of Human TGF beta 2. (ALDAAYCFRNVQDNCCLRPLYIDFKRDLGWKWIHEPK)
Conjugation	Un-conjugated
Alternate Names	TGF-beta2; Cetermin; LDS4; Polyergin; Glioblastoma-derived T-cell suppressor factor; G-TSF; Transforming growth factor beta-2; LAP; TGF-beta-2; BSC-1 cell growth inhibitor

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 48 kDa	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 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 or below. 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.

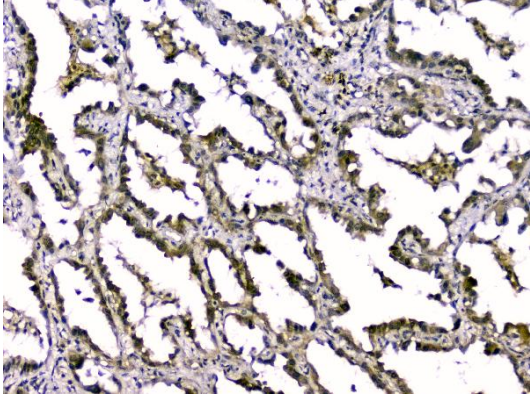
Note

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

## Bioinformation

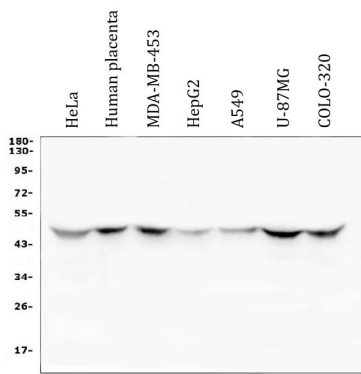
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Gene Symbol	TGFB2
Gene Full Name	transforming growth factor, beta 2
Background	<p>This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGF-beta family members. Disruption of the TGF-beta/SMAD pathway has been implicated in a variety of human cancers. A chromosomal translocation that includes this gene is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. Mutations in this gene may be associated with Loeys-Dietz syndrome. This gene encodes multiple isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]</p>
Function	<p>Transforming growth factor beta-2 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-2 (TGF-beta-2) chains, which constitute the regulatory and active subunit of TGF-beta-2, respectively.</p> <p>[Latency-associated peptide]: Required to maintain the Transforming growth factor beta-2 (TGF-beta-2) chain in a latent state during storage in extracellular matrix (By similarity). Associates non-covalently with TGF-beta-2 and regulates its activation via interaction with 'milieu molecules', such as LTBP1 and LRRC32/GARP, that control activation of TGF-beta-2 (By similarity).</p> <p>Transforming growth factor beta-2: Multifunctional protein that regulates various processes such as angiogenesis and heart development (PubMed:22772371, PubMed:22772368). Activation into mature form follows different steps: following cleavage of the proprotein in the Golgi apparatus, Latency-associated peptide (LAP) and Transforming growth factor beta-2 (TGF-beta-2) chains remain non-covalently linked rendering TGF-beta-2 inactive during storage in extracellular matrix (By similarity). At the same time, LAP chain interacts with 'milieu molecules', such as LTBP1 and LRRC32/GARP, that control activation of TGF-beta-2 and maintain it in a latent state during storage in extracellular milieus (By similarity). Once activated following release of LAP, TGF-beta-2 acts by binding to TGF-beta receptors (TGFB1 and TGFB2), which transduce signal (By similarity). [UniProt]</p>
Calculated Mw	48 kDa
PTM	The precursor is cleaved into mature TGF-beta-2 and LAP, which remains non-covalently linked to mature TGF-beta-2 rendering it inactive. [UniProt]
Cellular Localization	Secreted. [UniProt]



ARG42581 anti-TGF beta 2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42581 anti-TGF beta 2 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.



ARG42581 anti-TGF beta 2 antibody WB image

Western blot: 50  $\mu$ g of samples under reducing conditions. HeLa, Human placenta, MDA-MB-453, HepG2, A549, U-87MG and COLO-320 whole cell lysates stained with ARG42581 anti-TGF beta 2 antibody at 0.5  $\mu$ g/ml dilution, overnight at 4°C.