

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. (ALDAAYCFRNVQDNCCRLPLYIDFKRDLGWKWIHEPK)
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 ₂ HPO ₄ , 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

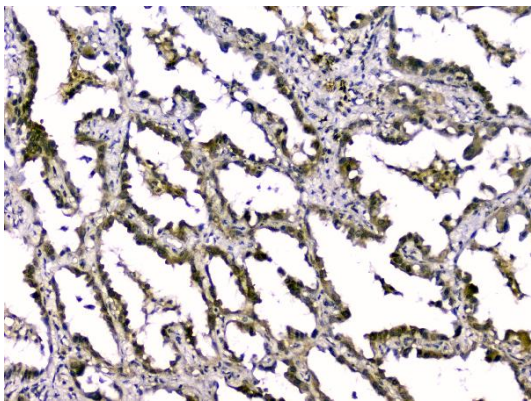
before use.

Note

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

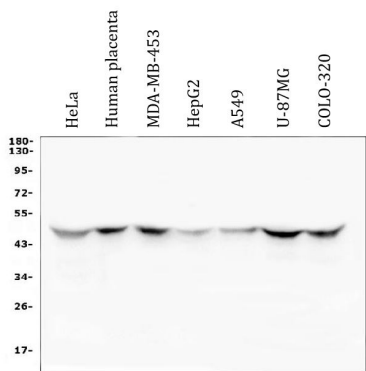
Bioinformation

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 µg/ml dilution, overnight at 4°C.



ARG42581 anti-TGF beta 2 antibody WB image

Western blot: 50 µg 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 µg/ml dilution, overnight at 4°C.