

## ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody

Package: 100 µl

Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes TGFBR2 / TGF beta Receptor II
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TGFBR2 / TGF beta Receptor II
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 23-280 of Human TGFBR2 / TGF beta Receptor II (NP_003233.4).
Conjugation	Un-conjugated
Alternate Names	FAA3; AAT3; TbetaR-II; TGF-beta receptor type-2; LDS2B; MFS2; TGF-beta type II receptor; EC 2.7.11.30; TAAD2; TGFR-2; LDS2; Transforming growth factor-beta receptor type II; TGFbeta-RII; TGF-beta receptor type II; RIIC; LDS1B

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat lung, Mouse lung and A549	
Observed Size	75 kDa	

### Properties

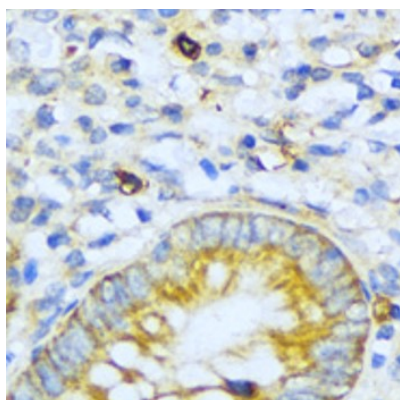
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. 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

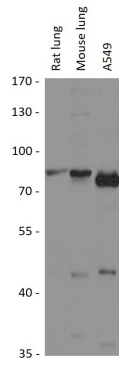
Gene Symbol	TGFBR2
Gene Full Name	transforming growth factor, beta receptor II (70/80kDa)
Background	This gene encodes a member of the Ser/Thr protein kinase family and the TGFβ receptor subfamily. The encoded protein is a transmembrane protein that has a protein kinase domain, forms a heterodimeric complex with another receptor protein, and binds TGF-β. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation. Mutations in this gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding different isoforms have been characterized. [provided by RefSeq, Jul 2008]
Function	Transmembrane serine/threonine kinase forming with the TGF-β type I serine/threonine kinase receptor, TGFBR1, the non-promiscuous receptor for the TGF-β cytokines TGFβ1, TGFβ2 and TGFβ3. Transduces the TGFβ1, TGFβ2 and TGFβ3 signal from the cell surface to the cytoplasm and is thus regulating a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFBR1 and 2 TGFBR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFBR1 by the constitutively active TGFBR2. Activated TGFBR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to the nucleus where it modulates the transcription of the TGF-β-regulated genes. This constitutes the canonical SMAD-dependent TGF-β signaling cascade. Also involved in non-canonical, SMAD-independent TGF-β signaling pathways. [UniProt]
Calculated Mw	65 kDa
PTM	Phosphorylated on a Ser/Thr residue in the cytoplasmic domain. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Membrane raft. [UniProt]

## Images



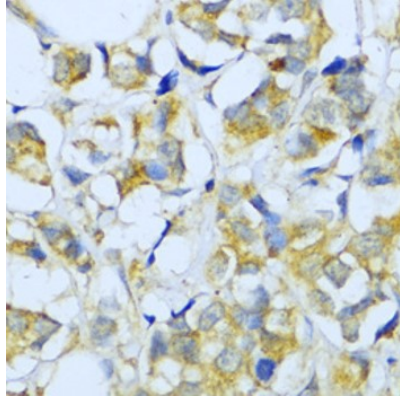
ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human appendix stained with ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody at 1:100 dilution.



#### ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody WB image

Western blot: 25 µg of Rat lung, Mouse lung and A549 cell lysates stained with ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody at 1:1000 dilution.



#### ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer stained with ARG59501 anti-TGFBR2 / TGF beta Receptor II antibody at 1:100 dilution.