

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 | |

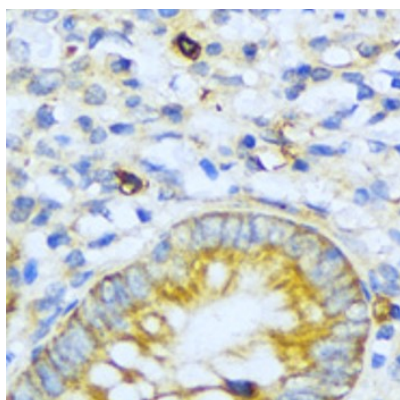
Properties

| | |
|---------------------|---|
| 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. |

Bioinformation

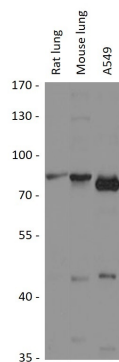
| | |
|-----------------------|--|
| Gene Symbol | TGFB2 |
| Gene Full Name | transforming growth factor, beta receptor II (70/80kDa) |
| Background | This gene encodes a member of the Ser/Thr protein kinase family and the TGFβ receptor subfamily. The encoded protein is a transmembrane protein that has 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, TGFR1, the non-promiscuous receptor for the TGF-β cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 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 TGFR1 and 2 TGFB2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFR1 by the constitutively active TGFB2. Activated TGFR1 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



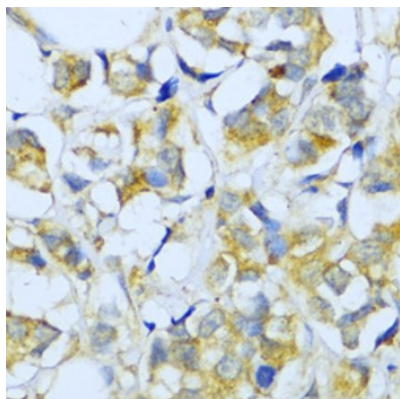
ARG59501 anti-TGFB2 / TGF beta Receptor II antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human appendix stained with ARG59501 anti-TGFB2 / 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.