

TGF-beta Receptor II Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11026**Specification**

TGF-beta Receptor II Antibody - Product Information

Application	WB, IHC
Primary Accession	P38438
Other Accession	NP_112394
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	64241

TGF-beta Receptor II Antibody - Additional Information**Gene ID** 81810

Application & Usage	The antibody can be used for Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Blocking peptide is available separately.
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Other Names

Transforming growth factor-beta receptor type II, Transforming growth factor-beta receptor type 2, TGF-beta type II receptor, TbetaR-II; TGFR-2, TGFG2, TGFR 2

Target/Specificity

TGF-b Receptor II

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

TGF-beta Receptor II Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TGF-beta Receptor II Antibody - Protein Information

Name Tgfbr2

Function

Transmembrane serine/threonine kinase forming with the TGF- beta type I serine/threonine kinase receptor, TGFB1, the non- promiscuous receptor for the TGF-beta 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 TGFB1 and 2 TGFB2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFB1 by the constitutively active TGFB2. Activated TGFB1 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-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P37173}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P37173} Membrane raft {ECO:0000250|UniProtKB:P37173}

TGF-beta Receptor II Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TGF-beta Receptor II Antibody - Images**TGF-beta Receptor II Antibody - Background**

TGF- β (Transforming growth factor-beta superfamily members are critical regulators of cell proliferation, differentiation, morphogenesis, and pathogenesis. TGF-beta receptor is a serine/threonine kinase receptor complex that consists of two distinct transmembrane proteins known as type I and type II receptors. In response to ligand binding, the type II receptors form a stable complex with the type I receptors allowing phosphorylation and thus activation of the type I receptor kinases.