

TGF-beta Receptor II Blocking Peptide
Catalog # PBV10496b**Specification**

TGF-beta Receptor II Blocking Peptide - Product Information

Primary Accession	P38438
Other Accession	NP_112394
Gene ID	81810
Calculated MW	64241

TGF-beta Receptor II Blocking Peptide - Additional Information**Gene ID** 81810**Application & Usage**

The peptide is used for blocking the antibody activity of TGF- β Receptor II. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

TGF-beta receptor type-2, TGFR-2, 2.7.11.30, TGF-beta type II receptor, Transforming growth factor-beta receptor type II, TGF-beta receptor type II, TbetaR-II, Tgfbr2

Target/Specificity

TGF-b Receptor II

Formulation

50 μ g (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

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

TGF-beta Receptor II Blocking Peptide - 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 Blocking Peptide - 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 Blocking Peptide - Images