

# TGFBR2 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI12490

# **Product Information**

Application	WB
Primary Accession	<u>P37173</u>
Other Accession	<u>NM_003242, NP_003233</u>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Goat, Bovine, Sheep
Predicted	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64568

# **Additional Information**

Gene ID	7048
Alias Symbol Other Names	HNPCC6, MFS2, RIIC, Tbeta, AAT3, FAA3, LDS1B, LDS2B, TAAD2, TGFR-2, TGFbeta-RII
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
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-TGFBR2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	TGFBR2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	TGFBR2
Function	Transmembrane serine/threonine kinase forming with the TGF- beta type I serine/threonine kinase receptor, TGFBR1, 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 thus regulates 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 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-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways.

**Cellular Location** 

Cell membrane; Single-pass type I membrane protein. Membrane raft

### References

Song, K., (2006) J. Biol. Chem. 281(12), 7765-7774 Reconstitution and Storage: Forshorttermuse, store at 2-8 Cupto 1 w eek. For long terms to rage, store at -20 Cinsmallali quots to prevent freeze-thaw cycles.

#### Images



WB Suggested Anti-TGFBR2 Antibody Titration: 5.0µg/ml Positive Control: HepG2 cell lysate TGFBR2 is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.