

Rabbit TGFB2 Polyclonal Antibody | anti-TGFB2 antibody

Phospho-TGFB2 (Ser553) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329339	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

TGFB2; Polyclonal Antibody; Phospho-TGFB2 (Ser553) Antibody; AAT3; FAA3; LDS1B; LDS2; LDS2B; MFS2; RIIC; TAAD2; TbetaR II; TbetaR-II; TGF beta receptor type 2; TGF beta receptor type II; TGF beta receptor type IIB; TGF beta type II receptor; TGF-beta receptor type II; TGF-beta receptor type-2; TGF-beta type II receptor; TGF-beta-R2; TGFB R2; TGFBeta-RII; TGFBeta RII; Tgfb2; TGFR-2; TGFR2_HUMAN; Transforming growth factor beta receptor II; Transforming growth factor beta receptor type II; Transforming growth factor beta receptor type IIC; Transforming growth factor; beta receptor II (70/80kDa); transforming growth factor; beta receptor II alpha; beta receptor II beta; beta receptor II delta; beta receptor II epsilon; beta receptor II gamma; Transforming growth factor-beta receptor type II; anti-TGFB2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-TGFB2 (Ser553) Antibody detects endogenous levels of TGFB2 only when phosphorylated at Ser553.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-TGFB2 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human TGFB2 around the phosphorylation site of Ser553.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylated on a Ser/Thr residue in the cytoplasmic domain.
Subunit Structure	Homodimer. Heterohexamer; TGFB1, TGFB2 and TGFB3 homodimeric ligands assemble a functional receptor composed of two TGFB1 and TGFB2 heterodimers to form a ligand-receptor heterohexamer. The respective affinity of TGFB1 and TGFB2 for the ligands may modulate the kinetics of assembly of the receptor and may explain the different biological activities of TGFB1, TGFB2 and TGFB3. Interacts with DAXX. Interacts with TCTEX1D4. Interacts with ZFYVE9; ZFYVE9 recruits SMAD2 and SMAD3 to the TGF-beta receptor. Interacts with and is activated by SCUBE3; this interaction does not affect TGFB1-binding to TGFB2. Interacts with VPS39; this interaction is independent of the receptor kinase activity and of the presence of TGF-beta. Interacts with CLU.
Similarity	Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.
Subcellular Location	Cell membrane>Single-pass type I membrane protein. Membrane raft.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

Staining Hela cells(heat shock treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. Samples were then incubated with primary Ab(AF3855) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI (blue).



WB (Western Blot)

Western blot analysis of extracts from Rat brain, using Phospho-TGFB2 (Ser553) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-TGFB2 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	67782326
NCBI GeneID	7048
NCBI Accession #	NP_001020018.1
NCBI GenBank Nucleotide #	NM_001024847.2
UniProt Accession #	P37173; Q15580; Q6DKT6; Q99474; B4DTV5
Molecular Weight	64,568 Da
NCBI Official Full Name	TGF-beta receptor type-2 isoform A
NCBI Official Synonym Full Names	transforming growth factor, beta receptor II (70/80kDa)
NCBI Official Symbol	TGFB2
NCBI Official Synonym Symbols	AAT3; FAA3; MFS2; RIIC; LDS1B; LDS2B; TAAD2; TGFR-2; TGFbeta-RII
NCBI Protein Information	TGF-beta receptor type-2; tbetaR-II; TGF-beta type II receptor; TGF-beta receptor type IIB; transforming growth factor beta receptor type IIC
UniProt Protein Name	TGF-beta receptor type-2
UniProt Gene Name	TGFB2
UniProt Synonym Gene Names	TGFR-2; TGF-beta receptor type II; TbetaR-II
UniProt Entry Name	TGFR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

