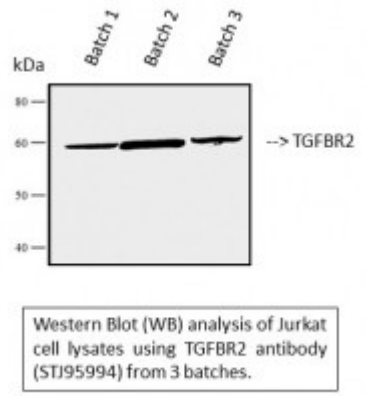
Anti-TG beta RII antibody



Western Blot (WB) analysis of Jurkat cell lysates using TGFBR2 antibody (STJ95994) from 3 batches.

Description	TGFbeta RII is a protein encoded by the TGFBR3 gene which is approximately 93,4 kDa. TGFbeta RII is secreted into the cell membrane. It is involved in apoptosis pathway, PAK pathway, CREB pathway and sertoli-sertoli cell junction dynamics. It is a membrane proteoglycan that often functions as a co-receptor with other TGF-beta receptor superfamily members. TGFbeta RII is expressed in the nervous system, blood, lung, muscle and heart. Mutations in the TGFBR3 gene may result in familial cerebral saccular aneurysm and intermediate uveitis. STJ95994 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of TGFbeta RIII protein.

Model	STJ95994
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human TGFbeta RII
Immunogen Region	60-140 aa, Internal
Gene ID	7048
Gene Symbol	TGFBR2
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
Specificity	TGFbeta RII Polyclonal Antibody detects endogenous levels of TGFbeta RII protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-

	chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	TGF-beta receptor type-2 TGFR-2 TGF-beta type II receptor Transforming growth factor-beta receptor type II TGF-beta receptor type II TbetaR-II
Molecular Weight	65 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11773OMIM:133239
Alternative Names	TGF-beta receptor type-2 TGFR-2 TGF-beta type II receptor Transforming growth factor-beta receptor type II TGF-beta receptor type II TbetaR-II
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 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 TGFBR1 and 2 TGFBR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFRB1 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 Localization	Cell membrane Membrane raft
Post-translational Modifications	Phosphorylated on a Ser/Thr residue in the cytoplasmic domain.