G-Biosciences Image not found or type unknown

Immunotag™ TGF β Receptor I Antibody

Antibody Specification

Catalog No.	ITA1519
Product Description	Immunotag™ TGF β Receptor I Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TGF β Receptor I
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IF/ICC,ELISA
Recommended Dilution	WB 1:500-1:2000,IF 1:100-1:500
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human TGF β Receptor I
Specificity	TGF β Receptor I Antibody detects endogenous levels of total TGF β Receptor I
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	TGFBR1
Accession No.	P36897

Antibody Specification

Alternate Names	AAT 5; AAT5; Activin A receptor type II like kinase 53kDa; Activin A receptor type II like kinase, 53kD; Activin A receptor type II like protein kinase of 53kD; activin A receptor type II-like kinase, 53kDa; activin A receptor type II-like protein kinase of 53kD; Activin receptor like kinase 5; Activin receptor-like kinase 5; ACVRLK 4; ACVRLK4; ALK 5; ALK-5; ALK5; LDS1A; LDS2A; MSSE; Serine/threonine protein kinase receptor R4; Serine/threonine-protein kinase receptor R4; SKR 4; SKR4; TbetaR I; TbetaR-I; TGF beta receptor type 1; TGF beta receptor type I; TGF beta type I receptor; TGF-beta receptor type I; TGF-beta receptor type-1; TGF-beta type I receptor; TGFBR 1; TGFBR1; TGFBR1 protein; TGFR 1; TGFR-1; TGFR1; TGFR1_HUMAN; Transforming growth factor beta receptor 1; Transforming growth factor beta receptor I (activin A receptor type II like kinase, 53kD); Transforming growth factor beta receptor I; transforming growth factor, beta receptor 1; transforming growth factor, beta receptor I (activin A receptor type II-like kinase, 53kD); Transforming growth factor-beta receptor type I;
Description	Transmembrane serine/threonine kinase forming with the TGF-beta type II serine/threonine kinase receptor, TGFBR2, 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 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. For instance, TGFBR1 induces TRAF6 autoubiquitination which in turn results in MAP3K7 ubiquitination and activation to trigger apoptosis. Also regulates epithelial to mesenchymal transition through a SMAD-independent signaling pathway through PARD6A phosphorylation and activation.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	56 kDa.
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.