

TGF Beta R1 Polyclonal Antibody Cy3 Conjugated

Catalog No: #C00366Cy3

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	TGF Beta R1 Polyclonal Antibody Cy3 Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	IF
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide aa 310-360 501 derived from human TGF-beta R1
Conjugates	Cy3
Target Name	TGF beta Receptor I
Other Names	AAT5; ALK5; ESS1; LDS1; MSSE; SKR4; ALK-5; LDS1A; LDS2A; TGFR-1; ACVRLK4; TGF-beta receptor type-1; Activin A receptor type II-like protein kinase of 53kD; Activin receptor-like kinase 5; Serine threonine-protein kinase receptor R4; TGF-beta type I receptor; Transforming growth factor-beta receptor
Accession No.	Swiss-Prot#:P36897NCBI Gene ID:7046
Uniprot	P36897
GeneID	7046;
Excitation Emission	512,550nm 570,615nm
Cell Localization	Cytoplasm
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

IF=1:50-200

Background

Transmembrane serine threonine kinase forming with the TGF-beta type II serine threonine kinase receptor, TGFB2, 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. For instance, TGFB1 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.

Note: This product is for in vitro research use only