Datasheet for ABIN4914599

anti-TGFBR1 antibody (AA 310-360) (PE)

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Overview

Quantity:	100 µL
Target:	TGFBR1
Binding Specificity:	AA 310-360
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TGFBR1 antibody is conjugated to PE
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human TGF-beta R1
Isotype:	IgG
Cross-Reactivity:	Cow, Human, Mouse, Rat
Predicted Reactivity:	Cow
Purification:	Purified by Protein A.

Target Details

Target:	TGFBR1
Alternative Name:	TGF beta Receptor I (TGFBR1 Products)
Background:	Synonyms: AAT5, ALK5, ESS1, LDS1, MSSE, SKR4, ALK-5, LDS1A, LDS2A, TGFR-1, ACVRLK4,

Target Details

	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 type I, TGF-beta receptor type I, TbetaR-I, TGFBR1 Background: 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.
Gene ID:	7046
UniProt:	P36897
Pathways:	Growth Factor Binding

Application Details

Application Notes:	FCM(1:20-100)
Restrictions:	For Research Use only

Handling

Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Storage:	-20 °C

Handling

Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months