Datasheet for ABIN7143178

anti-Activin A Receptor Type IB/ALK-4 antibody (AA 150-300) (HRP)

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Overview

Quantity:	100 µg
Target:	Activin A Receptor Type IB/ALK-4 (ACVR1B)
Binding Specificity:	AA 150-300
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Activin A Receptor Type IB/ALK-4 antibody is conjugated to HRP
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Activin receptor type-1B protein (150-300AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	Activin A Receptor Type IB/ALK-4 (ACVR1B)
Alternative Name:	ACVR1B (ACVR1B Products)
Background:	Background: Transmembrane serine/threonine kinase activin type-1 receptor forming an activin receptor complex with activin receptor type-2 (ACVR2A or ACVR2B). Transduces the activin

Target Details

signal from the cell surface to the cytoplasm and is thus regulating a many physiological and pathological processes including neuronal differentiation and neuronal survival, hair follicle development and cycling, FSH production by the pituitary gland, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. Activin is also thought to have a paracrine or autocrine role in follicular development in the ovary. Within the receptor complex, type-2 receptors (ACVR2A and/or ACVR2B) act as a primary activin receptors whereas the type-1 receptors like ACVR1B act as downstream transducers of activin signals. Activin binds to type-2 receptor at the plasma membrane and activates its serine-threonine kinase. The activated receptor type-2 then phosphorylates and activates the type-1 receptor such as ACVR1B. Once activated, the type-1 receptor binds and phosphorylates the SMAD proteins SMAD2 and SMAD3, on serine residues of the C-terminal tail. Soon after their association with the activin receptor and subsequent phosphorylation, SMAD2 and SMAD3 are released into the cytoplasm where they interact with the common partner SMAD4. This SMAD complex translocates into the nucleus where it mediates activin-induced transcription. Inhibitory SMAD7, which is recruited to ACVR1B through FKBP1A, can prevent the association of SMAD2 and SMAD3 with the activin receptor complex, thereby blocking the activin signal. Activin signal transduction is also antagonized by the binding to the receptor of inhibin-B via the IGSF1 inhibin coreceptor. ACVR1B also phosphorylates TDP2.
Aliases: Activin A receptor type 1B antibody, Activin A receptor type II like kinase 4 antibody, Activin A type 1B receptor antibody, Activin A type IB receptor antibody, Activin receptor like kinase 4 antibody, Activin receptor type 1B antibody, Activin receptor type IB antibody, Activin receptor type-1B antibody, Activin receptor-like kinase 4 antibody, ACTR IB antibody, ACTR-IB antibody, ACTRIB antibody, ACV1B_HUMAN antibody, ACVR 1B antibody, Acvr1b antibody, ACVRLK 4 antibody, ACVRLK4 antibody, ALK 4 antibody, ALK-4 antibody, ALK4 antibody, Serine(threonine) protein kinase receptor R2 antibody, Serine/threonine-protein kinase receptor R2 antibody, SKR 2 antibody, SKR2 antibody

UniProt:	P36896

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

