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Datasheet for ABIN7194134
ACVR1 Protein (His tag,Fc Tag)

Overview

Quantity:	200 µg
Target:	ACVR1 (ACRV1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This ACVR1 protein is labelled with His tag,Fc Tag.

Product Details

Purpose:	Recombinant Human ALK-2/ACVR1 Protein (His & Fc Tag)(Active)
Sequence:	Met 1-Val 124
Characteristics:	A DNA sequence encoding the extracellular domain (Met 1-Val 124) of human ALK2 (NP_001104537.1) precursor was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measure by its ability to bind with human BMP2 in a functional ELISA.

Target Details

Target:	ACVR1 (ACRV1)
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Target Details

Alternative Name: [ALK-2/ACVR1 \(ACRV1 Products\)](#)

Background: ALK-2, also termed as ACVR1, was initially identified as an activin type I receptor because of its ability to bind activin in concert with ActRII or ActRIIB. ALK-2 is also identified as a BMP type I receptor. It has been demonstrated that ALK-2 forms complex with either the BMP-2/7-bound BMPRII or ACVR2A /ACVR2B. ALK-1 and ALK-2 presenting in the yeast *Saccharomyces cerevisiae* are two haspin homologues. Both ALK-1 and ALK-2 exhibit a weak auto-kinase activity in vitro, and are phosphoproteins in vivo. ALK-1 and ALK-2 levels peak in mitosis and late-S/G2. Control of protein stability plays a major role in ALK-2 regulation. The half-life of ALK-2 is particularly short in G1. Overexpression of ALK-2, but not of ALK-1, causes a mitotic arrest, which is correlated to the kinase activity of the protein. This suggests a role for ALK-2 in the control of mitosis. Endoglin is phosphorylated on cytosolic domain threonine residues by the TGF-beta type I receptors ALK-2 and ALK-5 in prostate cancer cells. Endoglin did not inhibit cell migration in the presence of constitutively active ALK-2. Defects in ALK-2 are a cause of fibrodysplasia ossificans progressiva (FOP).

Synonym: Activin Receptor Type-1, Activin Receptor Type I, ACTR-I, Activin Receptor-Like Kinase 2, ALK-2, Serine/Threonine-Protein Kinase Receptor R1, SKR1, TGF-B Superfamily Receptor Type I, TSR-I, ACVR1, ACVRLK2,ACVR1A,ACVRLK2,ALK2,FOP,SKR1

Molecular Weight: 39.6 kDa

NCBI Accession: [NP_001104537](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.