

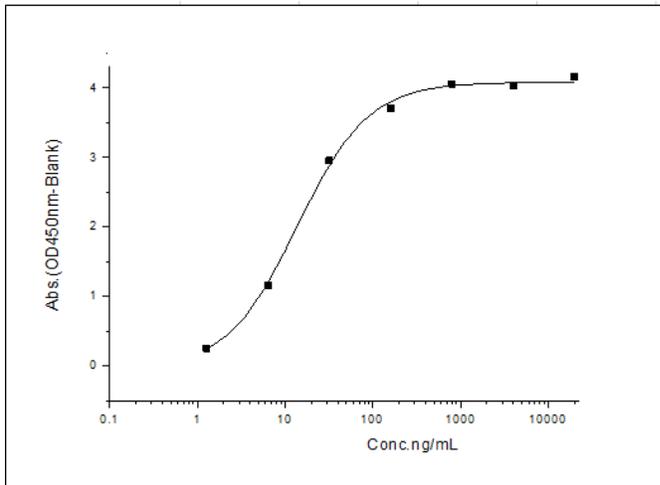
ACVR1B

Recombinant Human Activin Receptor type 1B / ALK-4 (Fc Tag)

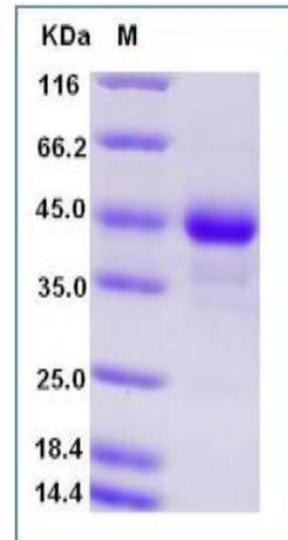
Catalog No.	CRH518A-Fc CRH518B-Fc	Quantity:	100 µg 200 µg
Alternate Names:	Activin receptor type-1B, Activin receptor type IB, ACTR-IB, Activin receptor-like kinase 4, ALK-4, Serine/threonine-protein kinase receptor R2, SKR2		
Description:	Activin Receptor type 1B (ALK-4) belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family, and TGFB receptor subfamily. ALK-4 acts as a transducer of activin or activin like ligands signals. Activin binds to either ACVR2A or ACVR2B and then forms a complex with ACVR1B. The known type II activin receptors include ActRII and ActRIIB, while the main type I activin receptor in mammalian cells is ALK-4 (ActRIB). In the presence of activin, type II and type I receptors form complexes whereby the type II receptors activate ALK-4 through phosphorylation. The activated ALK-4, in turn, transduces signals downstream by phosphorylation of its effectors, such as Smads, to regulate gene expression and affect cellular phenotype. ALK-4 is an important regulator of vertebrate development, with roles in mesoderm induction, primitive streak formation, gastrulation, dorsoanterior patterning, and left-right axis determination.		
UniProt ID:	P36896		
Accession Number:	NP_004293.1		
Protein Construction:	A DNA sequence encoding the human ACVR1B (Met1-Glu126) was expressed with the Fc region of human IgG1 at the C-terminus.		
Source:	HEK 293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human ACVR1B consists of 341 amino acids and predicts a molecular mass of 38.1 kDa.		
Purity:	> 90 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg protein as determined by the LAL method.		
Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized human TDGF1-His at 10 µg/mL (100 µL/well) can bind ACVR1B-Fc, the EC50 of human ACVR1B-Fc is 3-20 ng/mL.		
Predicted N-terminal:	Ser 24		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution.		

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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SDS-PAGE



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