

ACVR2B

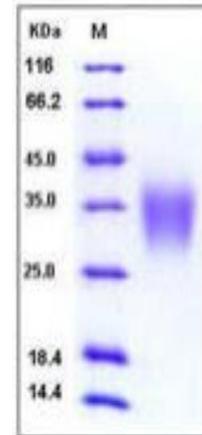
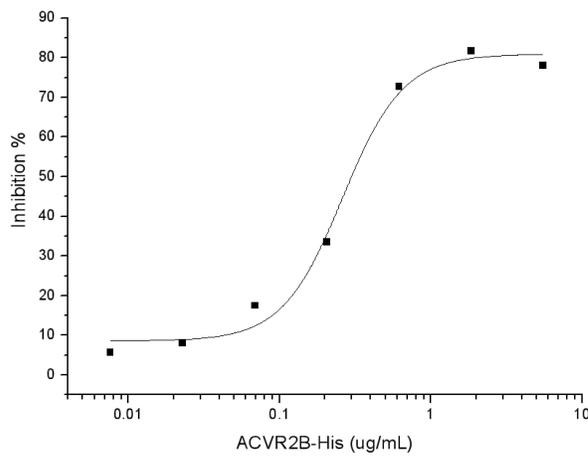
Recombinant Human ACVR2B / ActivinR-IIB (His Tag)

Catalog No.	CRH420A-His CRH420B-His	Quantity:	100 µg 200 µg
Alternate Names:	Activin receptor type-2B, Activin receptor type IIB, ACTR-IIB		
Description:	ACVR2A and ACVR2B are two activin type II receptors. ACVR2B is integral to the activin and myostatin signaling pathway. Ligands such as activin and myostatin bind to ACVR2A and ACVR2B. Myostatin, a negative regulator of skeletal muscle growth, is regarded as a potential therapeutic target and binds to ACVR2B effectively, and to a lesser extent, to ACVR2A. The structure of human ACVR2B kinase domain in complex with adenine establishes the conserved bilobal architecture consistent with all other catalytic kinase domains. Haplotype structure at the ACVR2B and follistatin loci may contribute to interindividual variation in skeletal muscle mass and strength. Defects in ACVR2B are a cause of left-right axis malformations.		
UniProt ID:	Q13705		
Accession Number:	NP_001097.2		
Protein Construction:	A DNA sequence encoding the extracellular domain of human ACVR2B (Met 1-Thr 134) was fused with a polyhistidine tag at the C-terminus.		
Source:	HEK293 Cells		
Molecular Weight:	The recombinant human ACVR2B comprises 127 amino acids and predicts a molecular mass of 15 kDa. As a result of glycosylation, rh ACVR2B migrates as an approximately 33-38 kDa protein in SDS-PAGE under reducing conditions.		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Purity:	> 97 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	<ol style="list-style-type: none"> 1. Measured by its ability to bind biotinylated Human INHBA-his in functional ELISA. 2. Measured by its ability to bind biotinylated Mouse INHBA-his in functional ELISA. 3. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.3-2 µg/mL in the presence of 10 ng/mL recombinant Activin A. 		
Predicted N-terminal:	Ser 19		
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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