

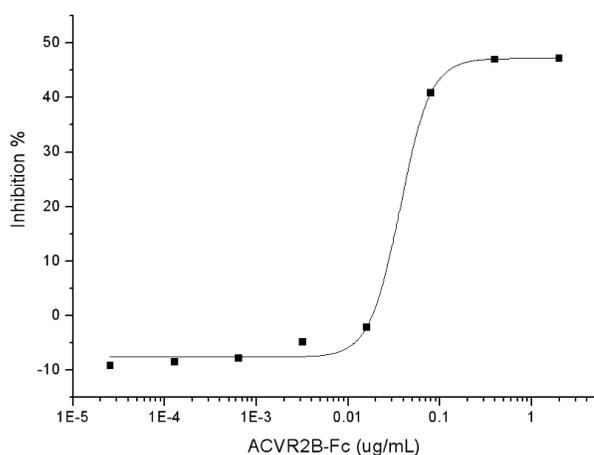
## ACVR2B

### Recombinant Human ACVR2B / ActivinR-IIB (Fc Tag)

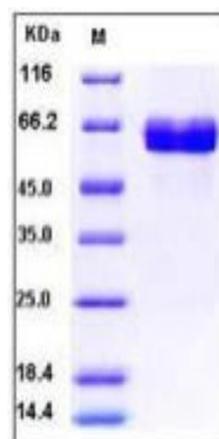
<b>Catalog No.</b>	CRH420A-Fc CRH420B-Fc	<b>Quantity:</b>	100 µg 200 µg
<b>Alternate Names:</b>	Activin receptor type-2B, Activin receptor type IIB, ACTR-IIB		
<b>Description:</b>	ACVR2A and ACVR2B are two activin type II receptors. ACVR2B is integral to the activin and myostatin signaling pathway. Ligands 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.		
<b>UniProt ID:</b>	Q13705		
<b>Accession Number:</b>	NP_001097.2		
<b>Protein Construction:</b>	A DNA sequence encoding the N-terminal segment (Met 1-Thr 134) from the extracellular domain of human ACVR2B was expressed with the fused human IgG1 Fc region at the C-terminus.		
<b>Source:</b>	HEK293 Cells		
<b>Formulation:</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
<b>Molecular Weight:</b>	The rhACVR2B/Fc chimera is a disulfide-linked homodimer generated after removal of the signal peptide. The reduced monomer consists of 354 aa with a predicted MW of 40.0 kDa and migrates at ~60-65 kDa in SDS-PAGE, due to glycosylation.		
<b>Purity:</b>	> 97 % as determined by SDS-PAGE.		
<b>Endotoxin Level:</b>	< 1.0 EU per µg of the protein as determined by the LAL method		
<b>Biological Activity:</b>	<ol style="list-style-type: none"> <li>1. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.02-0.1 µg/mL in the presence of 10 ng/mL recombinant Activin A.</li> <li>2. Measured by its binding ability in a functional ELISA.</li> <li>3. Immobilized human ACVR2B at 10 µg/mL (100 µl/well) can bind biotinylated human INHBA-His, The EC50 of biotinylated human INHBA-His is 0.112 µg/mL.</li> <li>4. Immobilized human ACVR2B at 10 µg/mL (100 µl/well) can bind biotinylated mouse INHBA-His, The EC50 of biotinylated mouse INHBA-His is 0.161 µg/mL.</li> </ol>		
<b>Predicted N-terminal:</b>	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.**

Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.02-0.1 µg/mL in the presence of 10 ng/mL recombinant Activin A.



SDS-PAGE



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**