

Acvr2b

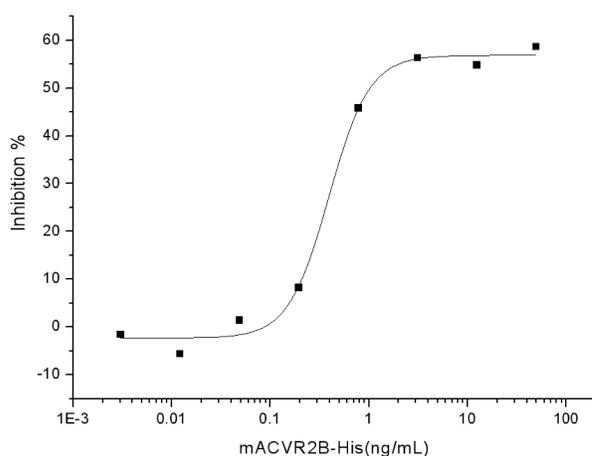
Recombinant Mouse Activin receptor type-2B (His Tag)

Catalog No.	CRM559A-His CRM559B-His	Quantity:	50 µg 100 µg
Alternate Names:	Activin receptor type-2B, Activin receptor type IIB, ACTR-IIB		
Description:	ACTR-IIA and ACTR-IIB are two activin type II receptors. ACTR-IIB is integral to the activin and myostatin signaling pathway. Ligands such as activin and myostatin bind to ACTR-IIA and ACTR-IIB. Myostatin, a negative regulator of skeletal muscle growth, is regarded as a potential therapeutic target and binds to ACTR-IIB effectively, and to a lesser extent, to ACTR-IIA. The structure of human ACTR-IIB kinase domain in complex with adenine establishes the conserved bilobal architecture consistent with all other catalytic kinase domains. Haplotype structure at the ACTR-IIB and follistatin loci may contribute to interindividual variation in skeletal muscle mass and strength. Defects in ACTR-IIB are a cause of left-right axis malformations.		
UniProt ID:	P27040		
Accession Number:	NP_031423.1		
Protein Construction:	A DNA sequence encoding the extracellular domain of mouse ACTR-IIB (Met 1-Thr 134) was fused with a polyhistidine tag at the C-terminus.		
Source:	HEK293 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 rACTR-IIB consists of 127 aa with a predicted MW of 14.8 kDa and migrates in SDS-PAGE under reducing conditions at ~33-37 kDa, due to glycosylation.		
Purity:	> 94 % 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. In a functional ELISA, immobilized human ACTR-IIB 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. 2. In a functional ELISA, immobilized mouse INHBA-his at 10 µg/mL (100 µl/well) can bind human Follistatin Protein, The EC50 of human Follistatin Protein is 0.39 µg/mL. 3. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.2-0.8 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.		

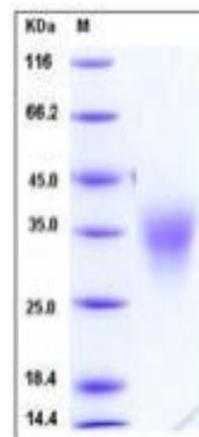


Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.2-0.8 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.