Active Recombinant Mouse Acvr2b Protein, His Tagged

Cat. No. Acvr2b-11205M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Mouse Activin RIIB Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ser 19-Thr 137 (Accession # P27040-1). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Ser 19
Species	Mouse
Source	HEK293
ProteinLength	19-137 aa
Description	Activin receptor type-2B (ACVR2B) is also known as ActR-IIB and MGC116908, ACVR2B is an activin type 2 receptor. Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. Type II receptors are considered to be constitutively active kinases. This gene encodes activin A type IIB receptor, which displays a 3- to 4-fold higher affinity for the ligand than activin A type II receptor. Defects in ACVR2B are the cause of

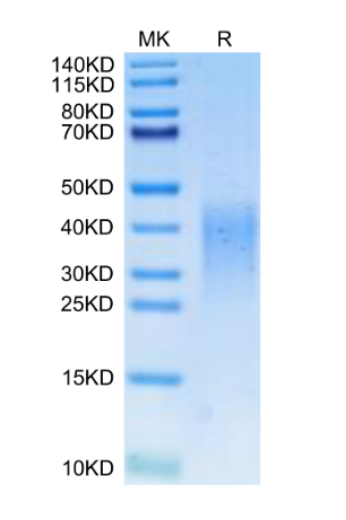
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	visceral heterotaxy autosomal type 4 (HTX4).
Form	Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.
Bio-activity	Immobilized Mouse Activin RIIB Protein, His Tag at 1 μg/mL (100 μL/well) can bind Bimagrumab with a linear range of 0.05-2 ng/mL.
Molecular Mass	The protein has a calculated MW of 15.6 kDa. The protein migrates as 25-40 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU/μg by the LAL method/rFC method.
Purity	>90% as determined by SDS-PAGE. >95% as determined by SEC-MALS.
Storage	This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 μg/μL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	Acvr2b activin receptor IIB [Mus musculus (house mouse)]
Official Symbol	Acvr2b
Synonyms	ACVR2B; activin receptor IIB; activin receptor type-2B; ACTR-IIB; activin receptor

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	type IIB; ActRIIB;
Gene ID	11481
mRNA Refseq	NM_007397
Protein Refseq	NP_031423
UniProt ID	P27040
SDS-PAGE	

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