Active Recombinant Mouse Acvr2a Protein, His Tagged, Low endotoxin

Cat. No. Acvr2a-11201M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Mouse Activin RIIA Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ala 20-Pro 135 (Accession # P27038-1). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Ala 20
Species	Mouse
Source	HEK293
ProteinLength	20-135 aa
Description	Activin receptor type-2A (ACVR2A) is also known as activin receptor type IIA, ACTR-IIA, ACTRIIA, and ACVR2, and is a single-pass type I membrane protein. ACVR2A belongs to the protein kinase superfamily, the TKL Ser/Thr protein kinase family, and the TGFB receptor subfamily. Upon ligand binding, ACVR2A forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors, which then phosphorylate and activate SMAD transcriptional regulators. ACVR2A also serves as a receptor for activin A, activin B, and inhibin A (the latter in complex with betaglycan). Two type II activin receptors (ACVR2A and ACVR2B) have been identified, which bind different activins with distinct affinities.
Form	Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.
Bio-activity	Immobilized Mouse Activin RIIA Protein, His Tag at 1

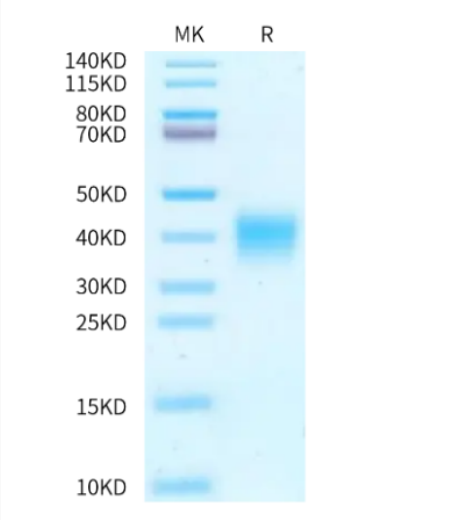
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	μg/mL (100 μL/well) can bind Bimagrumab with a linear range of 0.05-1 ng/mL.
Molecular Mass	The protein has a calculated MW of 15.3 kDa. The protein migrates as 25-35 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 0.01 EU/μg by the LAL method/rFC method.
Purity	>90% as determined by SDS-PAGE. >95% as determined by SEC-HPLC.
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	Acvr2a activin receptor IIA [Mus musculus (house mouse)]
Official Symbol	Acvr2a
Synonyms	ACVR2A; activin receptor IIA; activin receptor type-2A; ACTR-IIA; activin receptor type IIA; Acvr2; ActrIIa; TactrII;
Gene ID	11480
mRNA Refseq	NM_007396

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Protein Refseq	NP_031422
UniProt ID	P27038
SDS-PAGE	

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