Recombinant Mouse Activin Receptor 2B/ACVR2B Protein (His Tag)

Catalog Number: PKSM040825

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

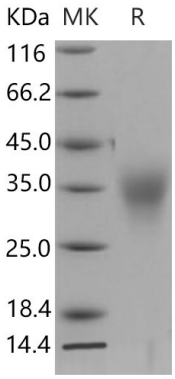
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse Activin Receptor 2B/ACVR2B protein Met 1-Thr 134, with an C-terminal His
Calculated MW	14.8 kDa
Observed MW	33-37 kDa
Accession	NP_031423.1
Bio-activity	1. Immobilized human ACVR2B at 10 μg/mL (100 μl/well) can bind biotinylated mouse INHBA-His, The EC_{50} of biotinylated mouse INHBA-His is 0.161 μg/mL. 2. Immobilized mouse INHBA-his at 10 μg/mL (100 μl/well) can bind human Follistatin Protein, The EC_{50} of human Follistatin Protein is 0.39 μg/mL. 3. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED_{50} for this effect is typically 0.2-0.8 μg/mL in the presence of 10 ng/mL recombinant Activin A.

Properties

Purity	> 94 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 94 % as determined by reducing SDS-PAGE.

Background

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.

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