Recombinant Mouse ALK4/ACVR1B Protein (Fc Tag)

Catalog Number: PKSM040959

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

Description

Species	Mouse
Source	HEK293 Cells-derived Mouse ALK4;ACVR1B protein Leu32-Glu126, with an C-terminal Fc
Calculated MW	37.7 kDa
Observed MW	39-50 kDa
Accession	Q61271
Bio-activity	Not validated for activity

Properties

Purity	> 95 % 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 a 0.2 µm filtered solution of 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
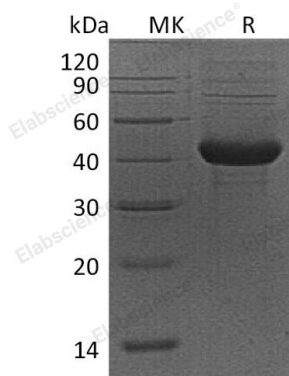
> 95 % as determined by reducing SDS-PAGE.

Background

Activin Receptor Type-1B (ACVR1B) is a single-pass type I membrane protein that belongs to the protein kinase superfamily. ACVR1B contains one GS domain and one protein kinase domain and is expressed in many tissues, most strongly in kidney, pancreas, brain, lung, and liver. ACVR1B acts as a transducer of activin or activin like ligands signals. Activin binds to either ACVR2A or ACVR2B and then forms a complex with ACVR1B, ACVR2A or ACVR2B activating ACVR1B through phosphorylation of its regulatory GS domain. They go on to recruit the R-SMADs, SMAD2 and SMAD3. ACVR1B also transducers signals of nodal, GDF-1, and Vg1. Mutations in ACVR1B are associated with pituitary tumors.

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