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Recombinant Human ALK4/ACVR1B Protein (His Tag)

Catalog Number: PKSH032037

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

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Species Human

Source HEK293 Cells-derived Human ALK4; ACVR1B protein Ser24-Glu126, with an C-

terminal His

Calculated MW 12.5 kDa
Observed MW 14-20 kDa
Accession P36896

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

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C 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 20mM PB, 150mM NaCl, pH 7.4.

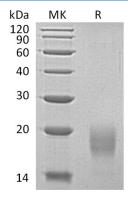
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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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