

Recombinant Human ALK4/ACVR1B Protein (His Tag)

Catalog No. PKSH032037

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

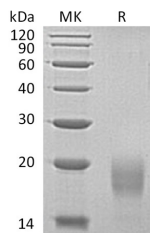
Description

Synonyms	Activin Receptor Type-1B;Activin Receptor Type IB;ACTR-IB;Activin Receptor-Like Kinase 4;ALK-4;Serine/Threonine-Protein Kinase Receptor R2;SKR2;ACVR1B;ACVRLK4;ALK4
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser24-Glu126
Accession	P36896
Calculated Molecular Weight	12.5 kDa
Observed molecular weight	14-20 kDa
Tag	C-His
Bioactivity	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

For Research Use Only

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.