Recombinant Human ALK-2/ACVR1 Protein (Human Cells, His Tag)

Catalog Number: PKSH032036

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

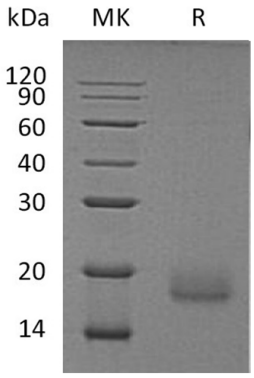
Description

Species	Human
Source	HEK293 Cells-derived Human ALK-2;ACVR1 protein Met21-Val124, with an C-terminal His
Calculated MW	12.6 kDa
Observed MW	17 kDa
Accession	Q04771
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 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-1; also known as Activin receptor type I; Activin receptor-like kinase 2; Serine/threonine-protein kinase receptor R1; TGF-B superfamily receptor type I; ACVRLK2 and ACVR1; is a single-pass type I membrane protein. ACVR1 is expressed in normal parenchymal cells; endothelial cells; fibroblasts and tumor-derived epithelial cells. ACVR1 belongs to the protein kinase superfamily. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins; composed of a ligand-binding extracellular domain with cysteine-rich region; a transmembrane domain; and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding; resulting in phosphorylation of type I receptors by type II receptor s. ACVR1 signals a particular transcriptional response in concert with activin type II receptors.