Recombinant Mouse BMPRIA/ALK-3 Protein (Fc &His Tag)

Catalog Number: PKSM041249

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

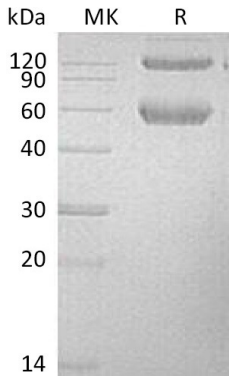
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse BMPRIA/ALK-3 protein Gln24-Arg152, with an C-terminal Fc & His
Calculated MW	42.2 kDa
Observed MW	55-60&120 kDa
Accession	P36895
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,pH7.4. 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



Background

ALK-3 is a type I receptor for bone morphogenetic proteins (BMPs) which belong to the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGFB receptor subfamily. The BMP receptors consists of the type I receptors BMPR1A and BMPR1B and the type I I receptor BMPR2. Seven known type I serine/threonine kinases and five mammalian type II serine/threonine kinase receptors function in TGF-beta superfamily signal transduction. The downstream molecules of the type I BMP receptors include the Smad (Smad1, 5 and 8) proteins that are phosphorylated in a ligand-dependent manner, and relay the BMP signal from the receptors to target genes in the nucleus. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. ALK-3 contains a GS domain and a protein kinase domain. ALK-3 is widely expressed. Defects in BMPR1A gene are a cause of a significant proportion of cases of Juvenile polyposis syndrome (JPS).