

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

**Catalog No.** PKSH032120

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

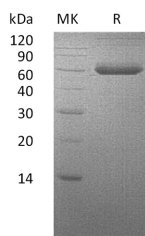
### Description

<b>Synonyms</b>	Bone Morphogenetic Protein Receptor Type-1A;BMP Type-1A Receptor;BMPR-1A;Activin Receptor-Like Kinase 3;ALK-3;Serine/Threonine-Protein Kinase Receptor R5;SKR5;CD292;BMPR1A;ACVRLK3;ALK3;10q23del
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Gln24-Arg152
<b>Accession</b>	P36894
<b>Calculated Molecular Weight</b>	42.1 kDa
<b>Observed molecular weight</b>	60 kDa
<b>Tag</b>	C-Fc-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Bone Morphogenetic Protein Receptor Type-1A (BMPR1A) belongs to the TKL Ser/Thr protein kinase family and TGFβ receptor subfamily, including the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. BMPR1A is a single-pass type I membrane protein and highly expressed in skeletal muscle. BMPR1A contains one GS domain and one protein protein kinase domain. BMPR1A is necessary for the extracellular matrix deposition by osteoblasts. BMPR1A can activate SMAD transcriptional regulators, binding with ligands. Defects in BMPR1A are a cause of juvenile polyposis syndrome, Cowden disease and hereditary mixed polyposis syndrome 2 (HMPS2).