

## Recombinant Mouse ALK-1/ACVRL1 Protein (Fc Tag)

**Catalog No.** PKSM041235

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

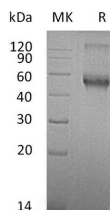
### Description

<b>Synonyms</b>	Serine/threonine-protein kinase receptor R3;SKR3;Activin receptor-like kinase 1;ALK-1;TGF-B superfamily receptor type I;TSR-I;ACVRL1;activin A receptor type II-like 1;activin A receptor
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Asp23-Pro119
<b>Accession</b>	Q61288
<b>Calculated Molecular Weight</b>	38.1 kDa
<b>Observed molecular weight</b>	55-60 kDa
<b>Tag</b>	C-Fc
<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

Activin Receptor-Like Kinase 1 (ALK-1) is a type I cell-surface receptor for the TGF- $\beta$  superfamily of ligands, which mediates signaling of BMP9 (bone morphogenetic protein) and BMP10. ALK1 signaling is necessary for angiogenesis during embryogenesis, wound healing, and tumor growth. ALK-1 has a high degree of similarity in serine-threonine kinase subdomains, a glycine and serine rich region preceding the kinase-domain, and a C-terminal tail with other activin receptor-like kinase proteins. ALK-1 is mainly expressed in endothelial cells regulating proliferation and migration in vitro and angiogenesis in vivo. Mutations in ALK-1 as well as in endoglin are associated with hereditary hemorrhagic telangiectasia (HHT), suggesting ALK-1 plays a critical role for in the control of blood vessel development or repair.