

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

Catalog No. PKSH032036

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

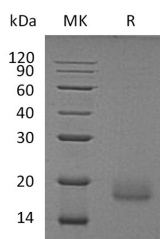
### Description

<b>Synonyms</b>	Activin Receptor Type-1;Activin Receptor Type I;ACTR-I;Activin Receptor-Like Kinase 2;ALK-2;Serine/Threonine-Protein Kinase Receptor R1;SKR1;TGF-B Superfamily Receptor Type I;TSR-I;ACVR1;ACVRLK2;ACVR1A;ACVRLK2;ALK2;FOP;SKR1
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met21-Val124
<b>Accession</b>	Q04771
<b>Calculated Molecular Weight</b>	12.6 kDa
<b>Observed molecular weight</b>	17 kDa
<b>Tag</b>	C-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 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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## 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 receptors. ACVR1 signals a particular transcriptional response in concert with activin type II receptors.

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