

## Recombinant Human Activin RIA/ALK-2 (C-Fc)

**Catalog No.** PKSH033967

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

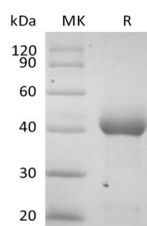
### Description

<b>Synonyms</b>	activin A receptor;type I;Activin RIA;ActivinRIA;ACTRI;ACVR1;ACVR1A;ACVRLK2;ALK2;ALK-2;FOP;SKR1;TSRI
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Asp23-Val124
<b>Accession</b>	Q53SV1
<b>Calculated Molecular Weight</b>	38.2 kDa
<b>Observed molecular weight</b>	38-45 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

Activin RIA, also known as ALK-2, TSK-7L, SKR1, TSR-I, and ACTR-I, is a glycosylated 65 kDa type I receptor in the

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TGF-beta serine/threonine kinase receptor family. Binding of TGF-beta superfamily ligands induces formation of a heterotetrameric complex that contains two chains each of a type I and a type II receptor in multiple combinations. The type II receptors phosphorylate the type I receptors which then phosphorylate and activate Smad signal transduction proteins. Activin RIA functions in a wide variety of growth and differentiation processes including gastrulation, skeletal system development, and cardiac morphogenesis. BMP signaling through Activin RIA is enhanced by the direct interaction between Activin RIA and RGM-B/DRAGON, a BMP coreceptor that also associates with other type I and type II receptors. Activin RIA can additionally phosphorylate the coreceptor Endoglin and is required for the inhibitory effect of Endoglin on prostate cancer cell motility.