

# Rat Activin RIIA/ACVR2A Protein

Cat. No. ARA-RM12A

## Description

<b>Source</b>	Recombinant Rat Activin RIIA/ACVR2A Protein is expressed from HEK293 with His tag at the C-terminus. It contains Ala20-Pro135.
<b>Accession</b>	P38444
<b>Molecular Weight</b>	The protein has a predicted MW of 15.06 kDa. Due to glycosylation, the protein migrates to 35-45 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

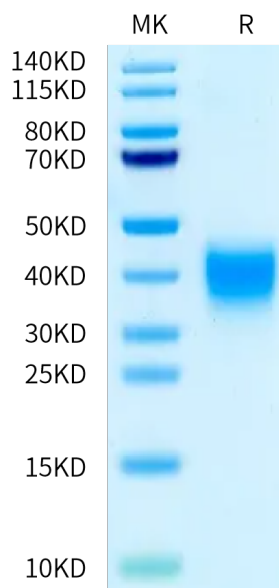
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Activin A receptor type 2A (ACVR2A) is a membrane receptor in the transforming growth factor- beta (TGF- $\beta$ ) signaling pathway, which is involved in the regulation of cell proliferation, migration, and apoptosis. Loss of ACVR2A has an important role in cancer progression and distant metastasis and may serve as a prognostic marker in patients with colon cancer.

## Assay Data

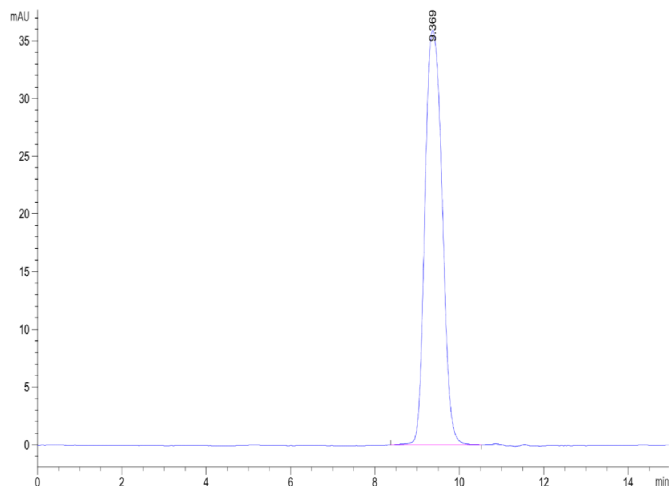
### Bis-Tris PAGE



Rat Activin RIIA on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

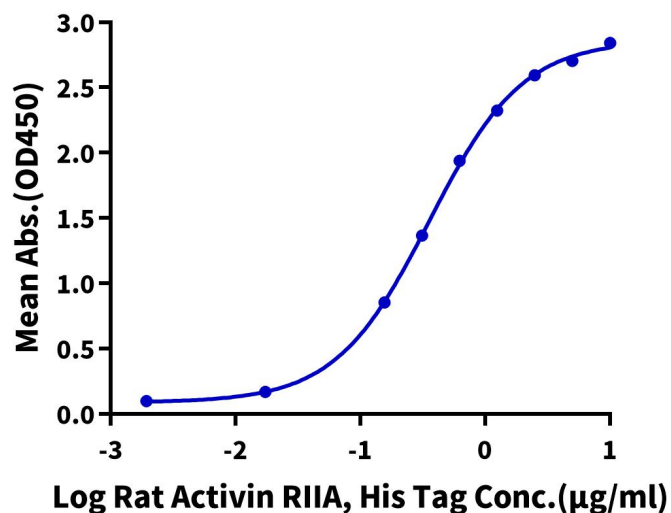


The purity of Rat Activin RIIA is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Rat Activin RIIA, His Tag ELISA**

0.2µg Human Activin A, No Tag Per Well



Immobilized Human Activin A, No Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Rat Activin RIIA, His Tag with the EC50 of 0.36µg/ml determined by ELISA (QC Test).