



## Synonym

Activin receptor type IIA,ACTRIIA

## Source

Mouse Activin RIIA Protein, His Tag(ACA-M52H3) is expressed from human 293 cells (HEK293). It contains AA Ala 20 - Pro 135 (Accession # [P27038-1](#)).

Predicted N-terminus: Ala 20

## Molecular Characterization

ACVR2A(Ala 20 - Pro 135)  
P27038-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 15.3 kDa. The protein migrates as 25-35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

## Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

## Storage

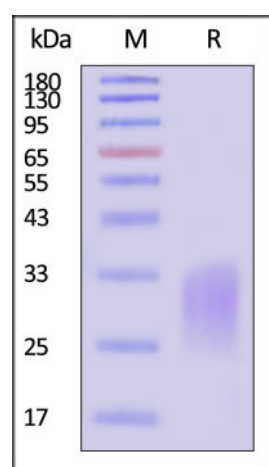
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

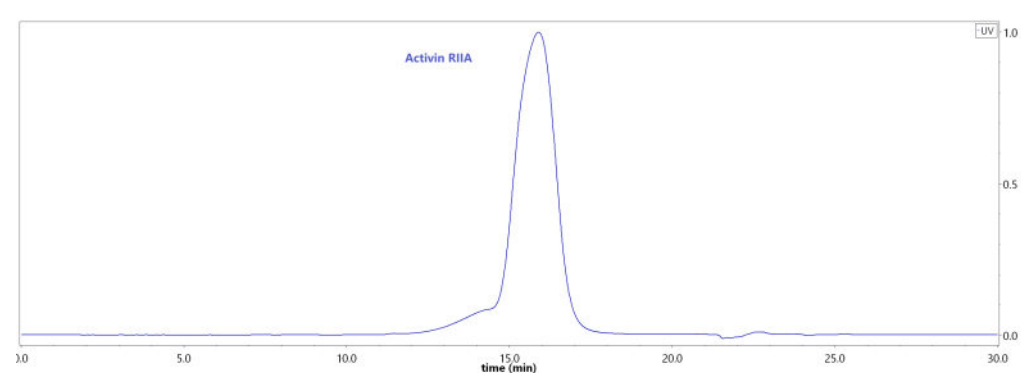
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



Mouse Activin RIIA Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

## SEC-HPLC

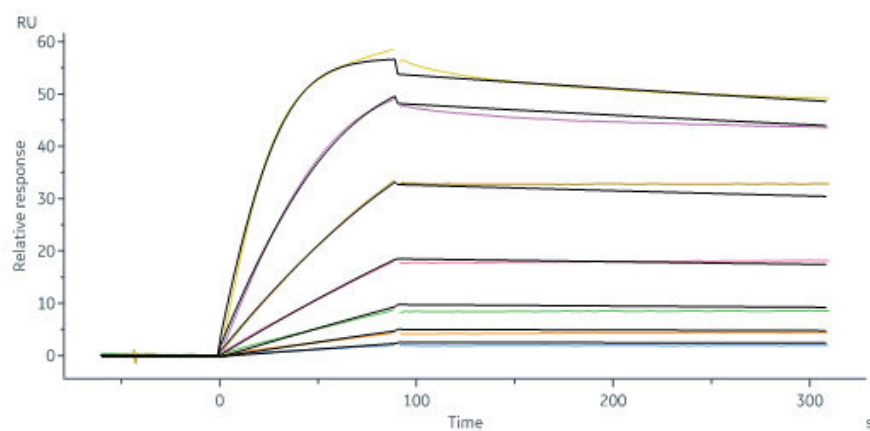


The purity of Mouse Activin RIIA Protein, His Tag (Cat. No. ACA-M52H3) was greater than 90% as determined by SEC-HPLC.

## Bioactivity-SPR

Discounts, Gifts,  
and more!





Mouse Activin RIIA Protein, His Tag (Cat. No. ACA-M52H3) capture on NTA-Series S sensor chip can bind Human Activin A Protein, Tag Free (Cat. No. ACA-H421b) with an affinity constant of 83.8 pM as determined in a SPR assay (Biacore 8K) (QC tested).

### Background

Activin receptor type-2A (ACVR2A) is also known as Activin receptor type IIA, ACTR-IIA, ACTRIIA and ACVR2, which is single-pass type I membrane protein. ACVR2A belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGFB receptor subfamily. On ligand binding, ACVR2A can form a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. ACVR2A is Receptor for activin A, activin B and inhibin A as well. Several type I I activin receptors have been identified and bind to different activins with different affinities.

### Clinical and Translational Updates

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and more!

