

Biotinylated Human Activin A Protein

Cat. No. ACV-HM401B

Description

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| Source | Recombinant Biotinylated Human Activin A Protein is expressed from HEK293 with Avi tag at the C-terminus. It contains Gly311-Ser426. |
| Accession | P08476 |
| Molecular Weight | The protein has a predicted MW of 14.78 kDa. Due to glycosylation, the protein migrates to 15-18 kDa based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per μg by the LAL method. |
| Purity | > 95% as determined by Tris-Bis PAGE |

Formulation and Storage

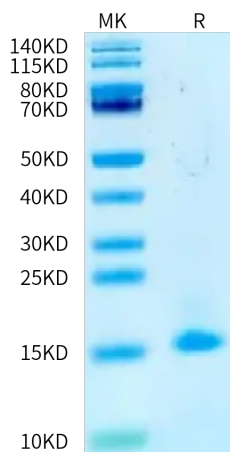
| | |
|-----------------------|--|
| Formulation | Lyophilized from 0.22 μm filtered solution in 4mM HCL. Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in 4mM HCL. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Activin-A, a member of the TGF- β superfamily, Extensive research over the past decades illuminated fundamental roles for activin-A in essential biologic processes, including embryonic development, stem cell maintenance and differentiation, haematopoiesis, cell proliferation and tissue fibrosis. Activin-A signals through two type I and two type II receptors which, upon ligand binding, activate their kinase activity, phosphorylate the SMAD2 and 3 intracellular signaling mediators that form a complex with SMAD4, translocate to the nucleus and activate or silence gene expression.

Assay Data

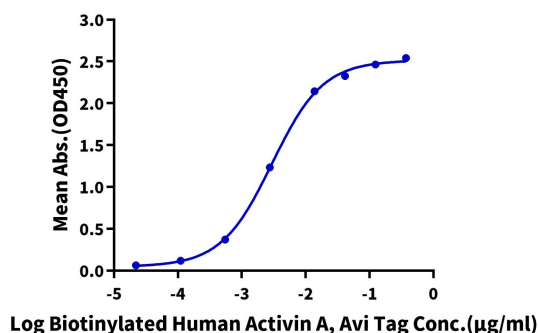
Tris-Bis PAGE



Biotinylated Human Activin A on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Biotinylated Human Activin A, Avi Tag ELISA
0.1 μg Human Activin RIIB, His Tag Per Well



Immobilized Human Activin RIIB, His Tag at 1 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) on the plate. Dose response curve for Biotinylated Human Activin A, Avi Tag with the EC50 of 3.0ng/ml determined by ELISA.