

Biotinylated Human Activin A Protein

Cat. No. ACV-HM401B

Description	
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 Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE

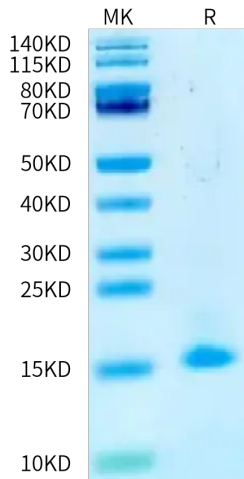
Formulation and Storage	
Formulation	Supplied as 0.22 μm filtered solution in 4 mM HCL.
Storage	Valid for 12 months from date of receipt when stored at -80°C Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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

Bis-Tris PAGE

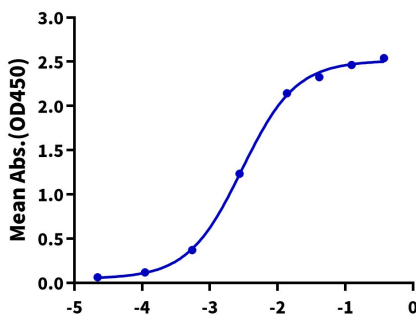


Biotinylated Human Activin A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

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 3.0 ng/ml determined by ELISA (QC Test).

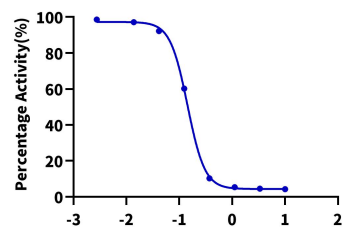
Log Biotinylated Human Activin A, Avi Tag Conc. ($\mu\text{g}/\text{ml}$)

Assay Data

Blocking Data

Inhibition of Human Activin RIIB and Biotinylated Human Activin A Binding

0.1µg Human Activin RIIB, His Tag Per Well



Log Anti-Activin RIIB Antibody, hFc Tag Conc. (µg/ml)

Serial dilutions of Anti-Activin RIIB Antibody were added into Human Activin RIIB, His Tag : Biotinylated Human Activin A, Avi Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.14µg/ml.