

Human/Cynomolgus Activin RIIB/ACVR2B Protein, Ultra Low Endotoxin



Cat. No. ARB-HM22B-UL

Description

Source	Recombinant Human/Cynomolgus Activin RIIB/ACVR2B Protein is expressed from HEK293 with hFc tag at the C-terminus.
	It contains Ser19-Thr137 (Human) / Ser40-Thr158 (Cynomolgus).
Accession	Q13705-1(Human) / XP_045242398.1(Cynomolgus)
Molecular Weight	The protein has a predicted MW of 39.6 kDa. Due to glycosylation, the protein migrates to 55-70 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.001 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

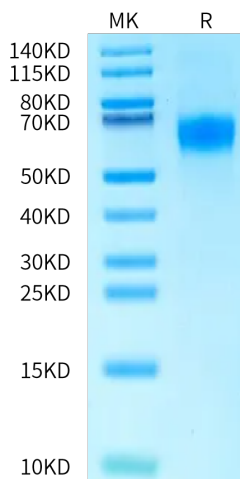
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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

ActRIIB (activin receptor type-2B) is an activin receptor subtype constitutively expressed in the whole body, playing a role in cellular proliferation, differentiation, and metabolism. For its various physiological activities, ActRIIB interacts with activin and multiple other ligands including myostatin (MSTN), growth differentiation factor 11 (GDF11), and bone morphogenetic protein 9 (BMP9).

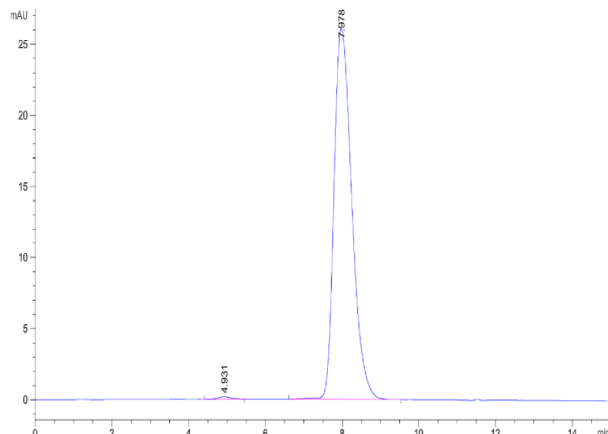
Assay Data

Bis-Tris PAGE



Human/Cynomolgus Activin RIIB on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



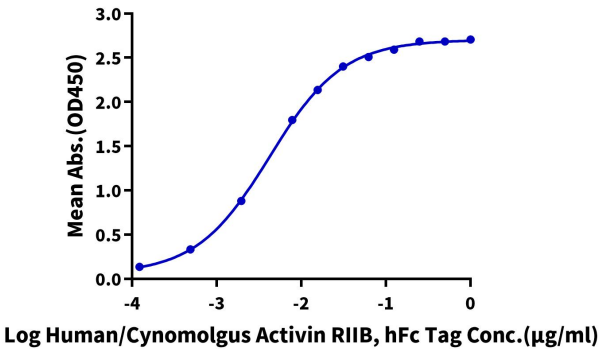
The purity of Human/Cynomolgus Activin RIIB is greater than 95% as determined by SEC-HPLC.

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Assay Data

ELISA Data

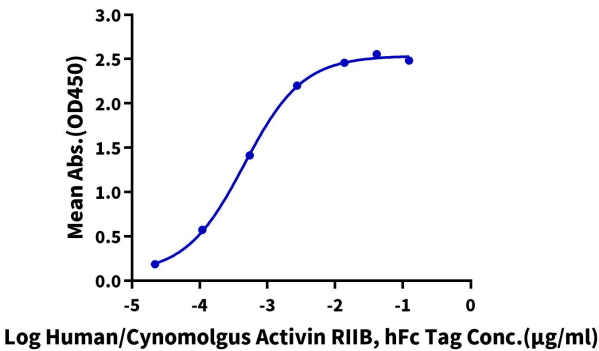
Human/Cynomolgus Activin RIIB, hFc Tag ELISA
0.1µg Human Activin A, No Tag Per Well



Immobilized Human Activin A, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human/Cynomolgus Activin RIIB, hFc Tag with the EC50 of 4.2ng/ml determined by ELISA (QC Test).

ELISA Data

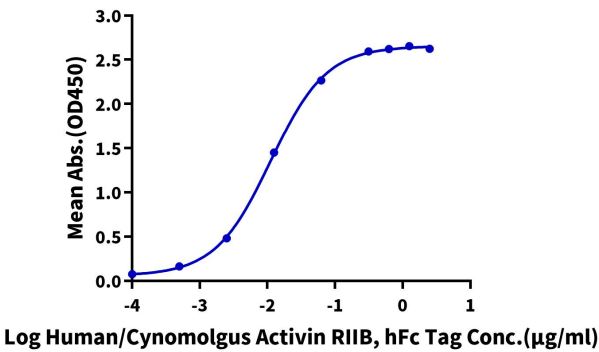
Human/Cynomolgus Activin RIIB, hFc Tag ELISA
0.1µg Human/Mouse/Rat GDF-8, No Tag Per Well



Immobilized Human/Mouse/Rat GDF-8, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human/Cynomolgus Activin RIIB, hFc Tag with the EC50 of 0.5ng/ml determined by ELISA.

ELISA Data

Human/Cynomolgus Activin RIIB, hFc Tag ELISA
0.2µg Human Latent GDF-11, His Tag Per Well



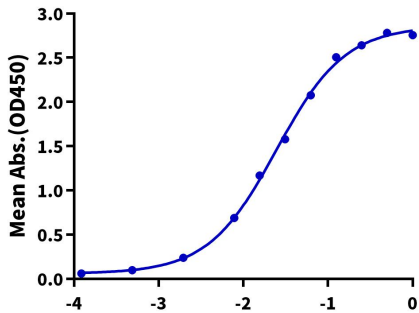
Immobilized Human Latent GDF-11, His Tag at 2µg/ml(100µl/well) on the plate. Dose response curve for Human/Cynomolgus Activin RIIB, hFc Tag with the EC50 of 11.2ng/ml determined by ELISA.

ELISA Data

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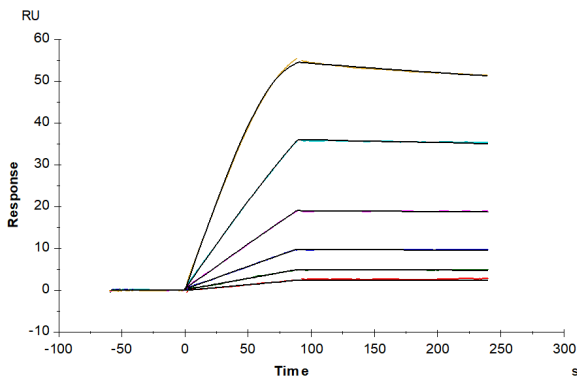
Assay Data

Human/Cynomolgus Activin RIIB, hFc Tag ELISA
0.05µg Human/Cynomolgus Activin RIIB, hFc Tag Per Well



Immobilized Human/Cynomolgus Activin RIIB, hFc Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-Activin RIIB Antibody, hFc Tag with the EC50 of 24.7ng/ml determined by ELISA.

SPR Data



Human/Cynomolgus Activin RIIB, hFc Tag captured on CM5 Chip via Protein A can bind Human GDF-2, No Tag with an affinity constant of 26.57 pM as determined in SPR assay (Biacore T200).