

Human/Cynomolgus Activin RIIB/ACVR2B Protein

Cat. No. ARB-HM22B

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 1EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

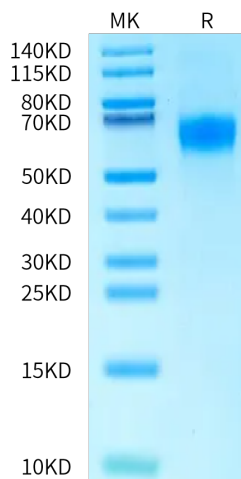
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
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).

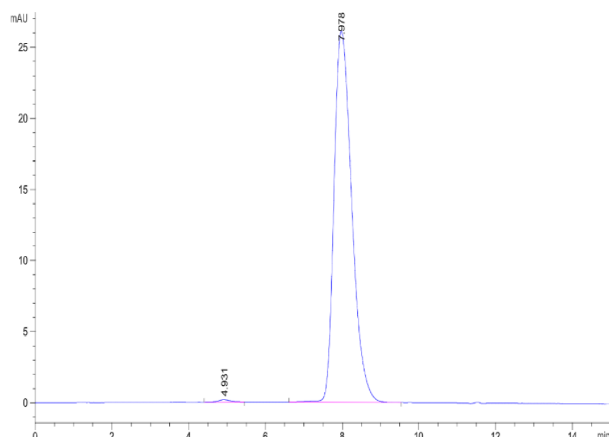
Assay Data

Bis-Tris PAGE



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

SEC-HPLC

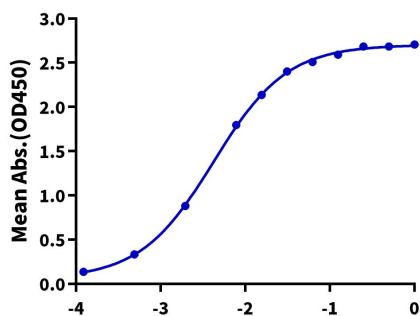


The purity of Human/Cynomolgus Activin RIIB is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

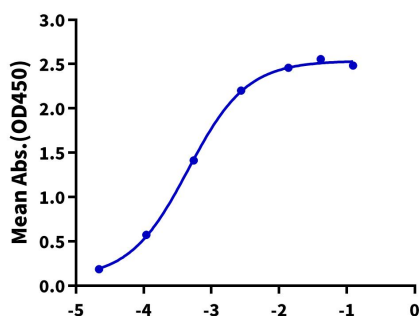
Human/Cynomolgus Activin RIIB, hFc Tag ELISA

0.1 μ g Human Activin A, No Tag Per WellLog Human/Cynomolgus Activin RIIB, hFc Tag Conc. (μ g/ml)

Immobilized Human Activin A, No Tag at 1 μ g/ml (100 μ l/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

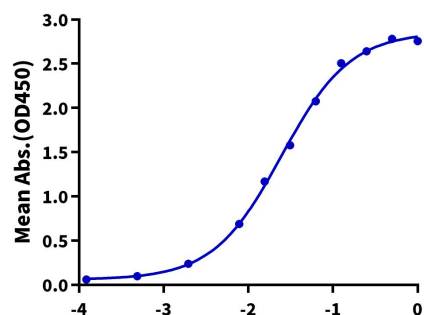
Human/Cynomolgus Activin RIIB, hFc Tag ELISA

0.1 μ g Human/Mouse/Rat GDF-8, No Tag Per WellLog Human/Cynomolgus Activin RIIB, hFc Tag Conc. (μ g/ml)

Immobilized Human/Mouse/Rat GDF-8, No Tag at 1 μ g/ml (100 μ l/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

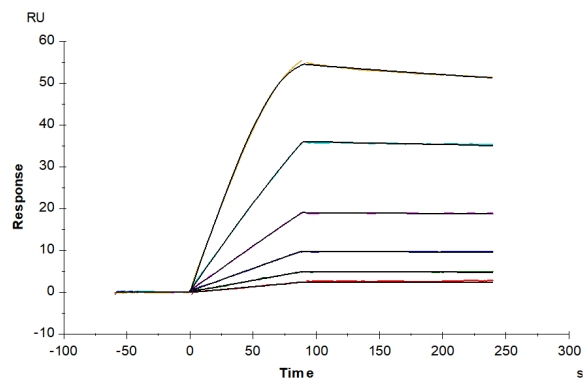
Human/Cynomolgus Activin RIIB, hFc Tag ELISA

0.05 μ g Human/Cynomolgus Activin RIIB, hFc Tag Per WellLog Biotinylated Anti-Activin RIIB Antibody, hFc Tag Conc. (μ g/ml)

Immobilized Human/Cynomolgus Activin RIIB, hFc Tag at 0.5 μ g/ml (100 μ l/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

Assay 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 μ M as determined in SPR assay (Biacore T200).