

Biotinylated Human NPR1/NPRA Protein

Cat. No. NPR-HM401B

Description

Source	Recombinant Biotinylated Human NPR1/NPRA Protein is expressed from HEK293 with His tag and Avi tag at the C-terminus. It contains Gly33-Glu473.
Accession	NP_000897.3
Molecular Weight	The protein has a predicted MW of 51.8 kDa. Due to glycosylation, the protein migrates to 65-80 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

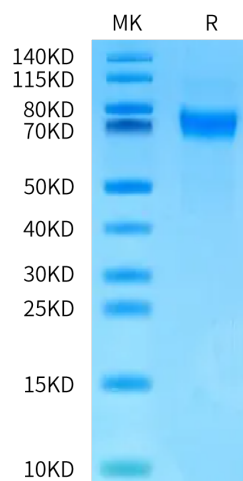
Formulation	Supplied as 0.22 µm filtered solution in PBS (pH 7.4).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

NPR1 (natriuretic peptide receptor 1), a receptor of ANP (atrial natriuretic peptide) which acting through NPR1, provokes hypotension. NPR1 was abundantly expressed in endothelial cells and smooth muscle cells of small arteries and arterioles. NPR1 plays a crucial role in ANP-mediated blood pressure regulation, presumably by a mechanism that is RGS2-dependent in the acute phase and RGS2-independent in the chronic phase.

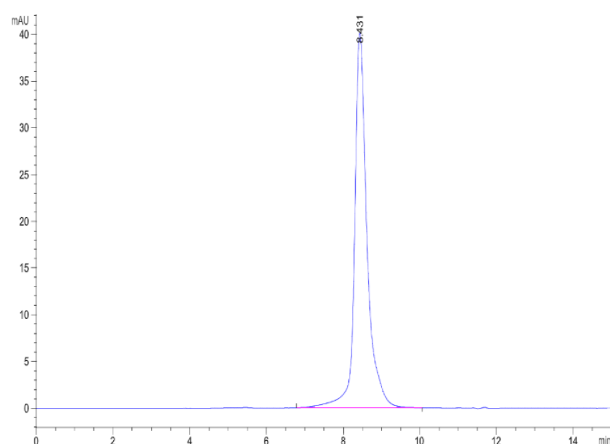
Assay Data

Bis-Tris PAGE



Biotinylated Human NPR1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



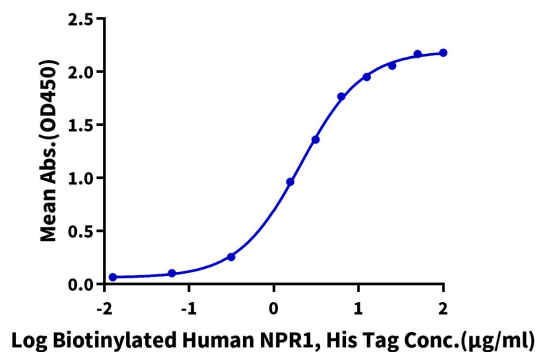
The purity of Biotinylated Human NPR1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

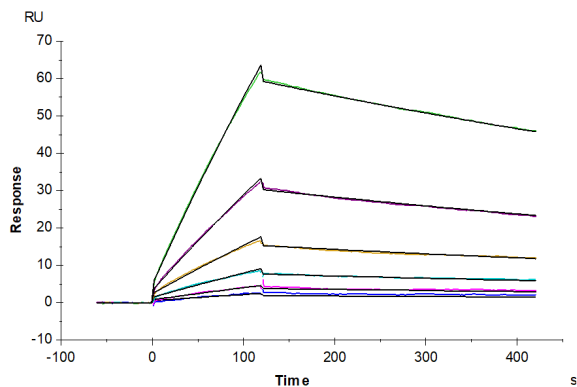
Biotinylated Human NPR1, His Tag ELISA

0.5µg Anti-NPR1 antibody, hFc Tag Per Well



Immobilized Anti-NPR1 antibody, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human NPR1, His Tag with the EC50 of 2.1µg/ml determined by ELISA (QC Test).

SPR Data



Anti-NPR1 Antibody, hFcTag captured on CM5 Chip via Protein A can bind Biotinylated Human NPR1, His Tag with an affinity constant of 2.34 µM as determined in SPR assay (Biacore T200).