Human NPR1/NPRA Protein (active dimer)

Cat. No. NPR-HM101

Description

Source	Recombinant Human NPR1/NPRA Protein is expressed from HEK293 with His tag at the C-terminus.
	It contains Gly33-Glu473.
Accession	NP_000897.3
Molecular Weight	The protein has a predicted MW of 50.51 kDa. Due to glycosylation, the protein migrates to 60-75 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
	> 90% as determined by HPLC

Formulation and Storage

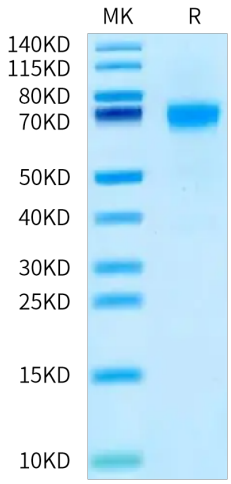
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for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

NPR1 (natriuretic peptide receptor 1), a receptor of ANP (atrial natriuretic peptide) whitch 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.

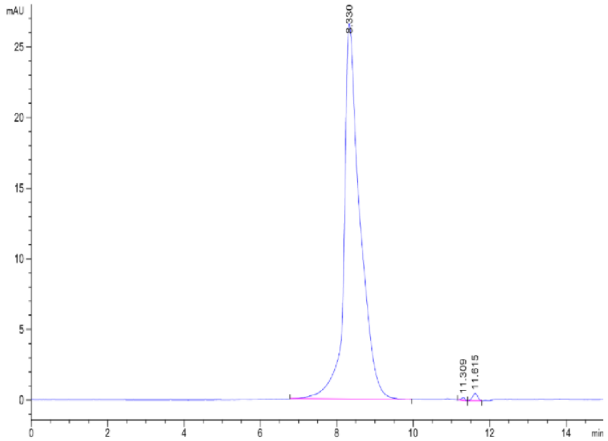
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



The purity of Human NPR1 is greater than 90% as determined by SEC-HPLC.

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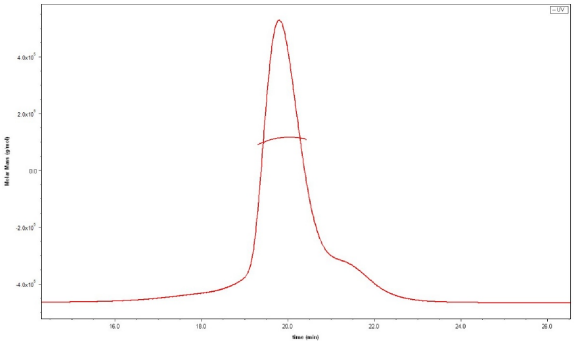
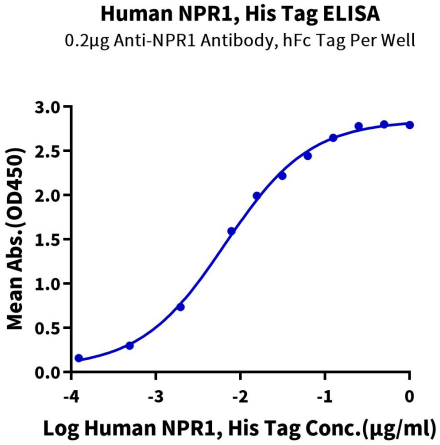
Assay Data

SEC-MALS



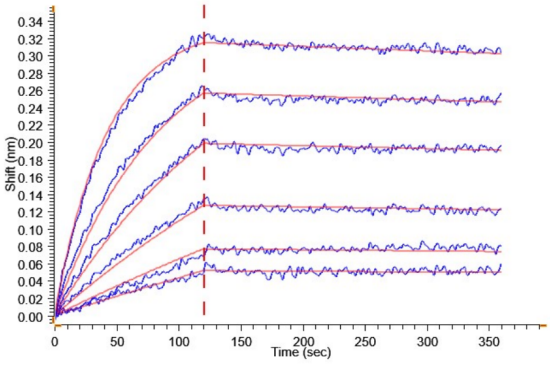
The purity of Human NPR1 is greater than 90% and the molecular weight of this protein is around 88-155 kDa as determined by SEC-MALS.

ELISA Data



Immobilized Anti-NPR1 Antibody, hFc Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Human NPR1, His Tag with the EC50 of 6.6ng/ml determined by ELISA.

BLI Data



Loaded Human NPR1, His Tag on Anti-His-Biosensor can bind Anti-NPR1 Antibody, hFc-Avi Tag with an affinity constant of 1.46 nM as determined in BLI assay (Gator® Prime).

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