

Human NPR1/NPRA Protein

Cat. No. NPR-HM301

Description

Source	Recombinant Human NPR1/NPRA Protein is expressed from HEK293 with mFc (IgG1) tag at the C-terminus. It contains Gly33-Glu473.
Accession	NP_000897.3
Molecular Weight	The protein has a predicted MW of 74.56 kDa. Due to glycosylation, the protein migrates to 80-110 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 > 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	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

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.

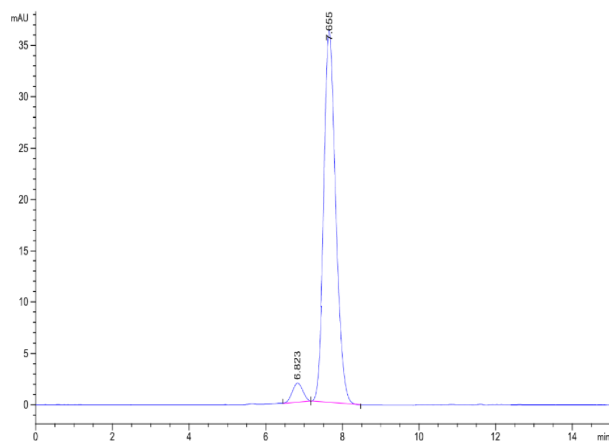
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



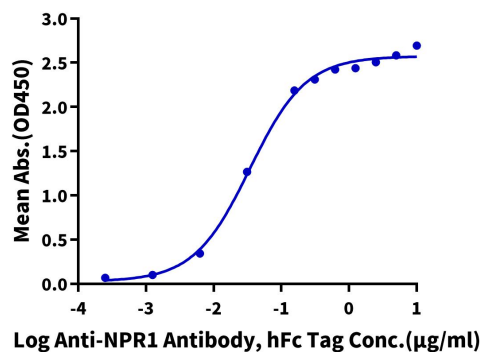
The purity of Human NPR1 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human NPR1, mFc Tag ELISA

0.5µg Human NPR1, mFc Tag Per Well



Immobilized Human NPR1, mFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Anti-NPR1 Antibody, hFc Tag with the EC50 of 43.2ng/ml determined by ELISA (QC Test).