

Rat NPR1/NPRA Protein

Cat. No. NPR-RM101

Description

Source	Recombinant Rat NPR1/NPRA Protein is expressed from HEK293 with His tag at the C-terminus. It contains Ser29-Glu469.
Accession	NP_036745.1
Molecular Weight	The protein has a predicted MW of 50.70 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 > 95% as determined by HPLC

Formulation and Storage

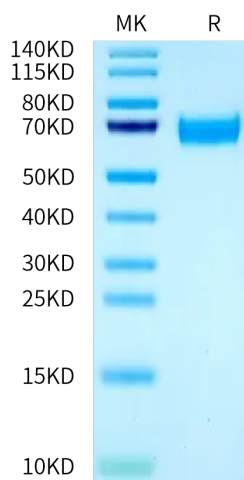
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for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

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.

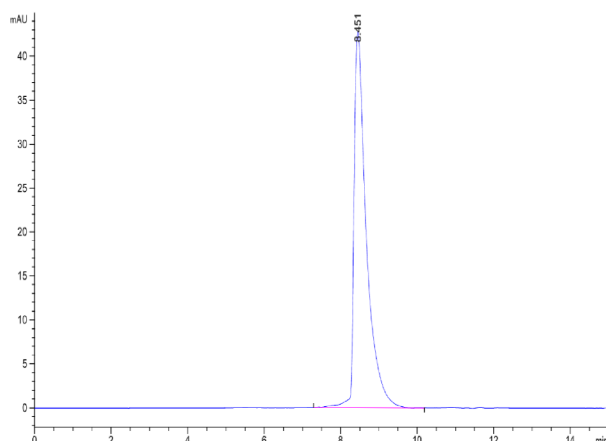
Assay Data

Bis-Tris PAGE



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

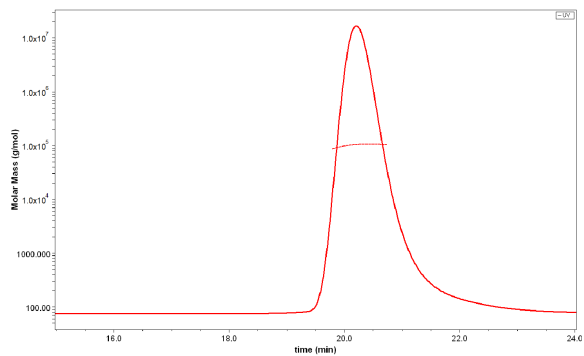
SEC-HPLC



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

Assay Data

SEC-MALS



The purity of Rat NPR1 is greater than 95% and the molecular weight of this protein is around 100-110 kDa as determined by SEC-MALS.