Recombinant Human NPR1 Protein, His-tagged

Cat. No. NPR1-1299H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NPR1 Protein (NP_000897.3)(33-473aa) was expressed in yeast with N-terminal His tag.
Species	Human
Source	Yeast
ProteinLength	33-473aa
Description	Guanylyl cyclases, catalyzing the production of cGMP from GTP, are classified as soluble and membrane forms (Garbers and Lowe, 1994 [PubMed 7982997]). The membrane guanylyl cyclases, often termed guanylyl cyclases A through F, form a family of cell-surface receptors with a similar topographic structure: an extracellular ligand-binding domain, a single membrane-spanning domain, and an intracellular region that contains a protein kinase-like domain and a cyclase catalytic domain. GC-A and GC-B function as receptors for natriuretic peptides; they are also referred to as atrial natriuretic peptide receptor A (NPR1) and type B (NPR2; MIM 108961). Also see NPR3 (MIM 108962), which encodes a protein with only the ligand-binding transmembrane and 37-amino acid cytoplasmic domains. NPR1 is a membrane-bound guanylate cyclase that serves as the receptor for both atrial and brain natriuretic peptides (ANP (MIM 108780) and BNP (MIM 600295), respectively).
Form	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol.

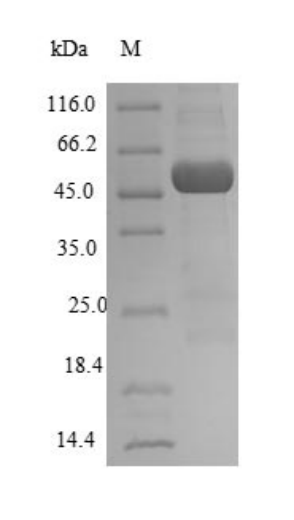
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	If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Molecular Mass	50.4kDa
AA Sequence	GNLTVAVVLPLANTSYPWSWARVGPAVELALAQVKARPDLLPGWTVRTVLGSSENA LGVCSDTAAPLAAVDLKWEHNPAVFLGPGCVYAAAPVGRFTAHWRVPLLTAGAPAL GFGVKDEYALTTRAGPSYAKLGDFVAALHRRLGWERQALMLYAYRPGDEEHCFFL VEGLFMRVRDRLNITVDHLEFAEDDLSHYTRLLRTMPRKGRVIYICSSPDAFRTLMLL ALEAGLCGEDYVFFHLDIFGQSLQGGQGPAPRRPWERGDGQDVSARQAFQAAKIIT YKDPDNPEYLEFLKQLKHLAYEQFNFTMEDGLVNTIPASFHDGLLLYIQAVTETLAHG GTVTDGENITQRMWNRSFQGVTGYLKIDSSGDRETDFSLWDMDPENGAFRVVLNY NGTSQELVAVSGRKLNWPLGYPPPDIPKCGFDNEDPACNQDHLSTLE
Purity	Greater than 90% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Storage	Store at -20°C upon receipt, aliquoting is necessary for mutiple use. Avoid repeated freeze-thaw cycles.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

GENE INFORMATION

Gene Name	NPR1 natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide

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	receptor A) [Homo sapiens]
Official Symbol	NPR1
Synonyms	ANPa; NPRA; ANPRA; GUC2A; GUCY2A
Gene ID	4881
mRNA Refseq	NM_000906.3
Protein Refseq	NP_000897.3
MIM	108960
UniProt ID	P16066
SDS-PAGE	

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