

Product datasheet for TP309267

Natriuretic Peptide Receptor A (NPR1) (NM_000906) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human natriuretic peptide receptor A/guanylate cyclase A (atriuretic peptide receptor A) (NPR1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC209267 protein sequence Red=Cloning site Green=Tags(s)

MPGPRRPAGSRLRLLLLLLPPLLLLLRGSHAGNLTVAVWLPLANTSYPWSWARVGPVELALAQVKARP
DLLPGWTVRTVLGSSSENALGVCSDTAAPLAAVDLKWEHNPAVFLGPGCVYAAAPVGRFTHWRVPLLTAG
APALGFGVKDEYALTTRAGPSYAKLGDFVAALHRRLGWERQALMLYAYRPGDEEHCFLLVEGLFMRVRDR
LNITVDHLEFAEDDLSHYTRLLRTMPRKGRVIYICSSPDAFRITLMLLALEAGLCGEDYVFFHLDIFGQSL
QGGQGPAPRRPWERGQDVSARQAFQAAKIITYKDPDNPEYLEFLKQLKHLAYEQNFNTMEDVLVNTIP
ASFHDGLLLYIQAVTETLAHGGTVTDGENITQRMWNRSFQGVGTGKIDSSGDRETDFSLWDMDPENGAF
RWLNYNNGTSQELVAVSGRKLNWPLGYPPPDIKPCGFDNEDPACNQDHLSTLEVLALVGSLSLLGILIVS
FFIYRKMQLEKELASELWRVRWEDVEPSSLERHLRSAGSRLTSLGRGSNYGSLTTEGQFQVFAKTAYYK
GNLVAVKRVNRKRIELTRKVLKHMVQNEHLTRFVACTDPPNICILTEYCPRGSLQDILENESIT
LDWMFRYSLTNDIVKGMFLHNGAICSHGNLSSNCVVDGRFVLKITDYGLSEFRDLDPQGHVYAKKL
WTAPELLRMASPPVRSQAGDVYSFGIILQEIALRSGVFHVEGLDLSPKEIIEVTRGEQPPFRPSLALQ
SHLEELGLLMQRCWAEDPQERPPFQIIRLTLRKFNRENSNILDNLLSRMEQYANNLEELVEERTQAYLE
EKRAEALLYQILPHSVAEQKRGETVQAEAFDSVTIYFSDIVGFTALSAESTPMQVVTLLNDLYTCFDA
VIDNFDVYKVTIGDAYMVVSGLPVRNGLHACEVARMALALLDAVRSFRIRHRPQEQLRLRIGIHTGPV
CAGVGLKMPRYCLFGDVTNTASRMESNGEALKIHLSSSETKAVLEEFGGFELELRGDVEMKGGKGVRTYWW
LLGERGSSTRG

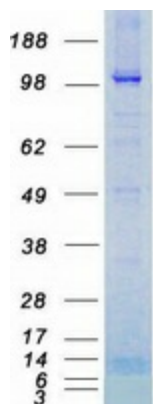
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	118.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000897
Locus ID:	4881
UniProt ID:	P16066
RefSeq Size:	4201
Cytogenetics:	1q21.3
RefSeq ORF:	3183
Synonyms:	ANPa; ANPRA; GUC2A; GUCY2A; NPRA
Summary:	<p>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).[supplied by OMIM, May 2009]</p>
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Purine metabolism, Vascular smooth muscle contraction

Product images:

Coomassie blue staining of purified NPR1 protein (Cat# TP309267). The protein was produced from HEK293T cells transfected with NPR1 cDNA clone (Cat# [RC209267]) using MegaTran 2.0 (Cat# [TT210002]).