

Product datasheet for RC209267L3

OriGene Technologies, Inc.

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Natriuretic Peptide Receptor A (NPR1) (NM 000906) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Natriuretic Peptide Receptor A (NPR1) (NM 000906) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Natriuretic Peptide Receptor A

Synonyms: ANPa; ANPRA; GUC2A; GUCY2A; NPRA

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC209267).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000906

ORF Size: 3183 bp





Natriuretic Peptide Receptor A (NPR1) (NM_000906) Human Tagged Lenti ORF Clone – RC209267L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000906.2</u>, <u>NP 000897.2</u>

RefSeq Size: 4201 bp
RefSeq ORF: 3186 bp
Locus ID: 4881
UniProt ID: P16066

Cytogenetics: 1q21.3

Domains: pkinase, CYCc, ANF_receptor

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Purine metabolism, Vascular smooth muscle contraction

MW: 119 kDa

Gene Summary: 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

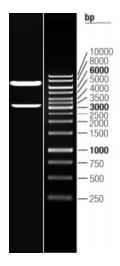
membrane-spanning domain, and an intracellular region that contains a protein kinase-like domain and a cyclase catalytic domain. GC-A and GC-B function as receptors for natriuretic peptides; they are also referred to as atrial natriuretic peptide receptor A (NPR1) and type B (NPR2; MIM 108961). Also 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]



Product images:



Double digestion of RC209267L3 using Sgfl and Mlul $\,$