

## Human NPR1 blocking peptide (DAG-P0880)

This product is for research use only and is not intended for diagnostic use.

## **PRODUCT INFORMATION**

Antigen 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).[supplied by OMIM, May 2009]
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Belongs to the adenylyl cyclase class-4/guanylyl cyclase family.Contains 1 guanylate cyclase domain.Contains 1 protein kinase domain.
Format	Lyophilised
Preservative	None
Storage	Shipped at 4°C. After reconstitution store at -20°C. Avoid freeze / thaw cycles.

## **GENE INFORMATION**

Gene Name	NPR1 natriuretic peptide receptor 1 [ Homo sapiens (human) ]
Official Symbol	NPR1

Synonyms	NPR1; natriuretic peptide receptor 1; ANPa; NPRA; ANPRA; GUC2A; GUCY2A; atrial natriuretic peptide receptor 1; GC-A; ANP-A; NPR-A; ANPR-A; guanylate cyclase A; natriuretic peptide receptor A; atrionatriuretic peptide receptor A; natriuretic peptide A type receptor; atrial natriuretic peptide receptor type A; natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide receptor A);
Entrez Gene ID	<u>4881</u>
mRNA Refseq	<u>NM_000906.3</u>
Protein Refseq	<u>NP_000897.3</u>
UniProt ID	P16066
Chromosome Location	1q21-q22
Pathway	Purine metabolism, organism-specific biosystem; Purine metabolism, conserved biosystem; Vascular smooth muscle contraction, organism-specific biosystem; Vascular smooth muscle contraction, conserved biosystem;
Function	ATP binding; G-protein coupled peptide receptor activity; GTP binding; guanylate cyclase activity; hormone binding; natriuretic peptide receptor activity; peptide hormone binding; protein kinase activity; protein kinase binding;

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