



Human NPR1 peptide (DAG-P1736)

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]
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Conjugate	Unconjugated
Sequence Similarities	Belongs to the adenylyl cyclase class-4/guanylyl cyclase family.Contains 1 guanylate cyclase domain.Contains 1 protein kinase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

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	4881
mRNA Refseq	NM_000906.3
Protein Refseq	NP_000897.3
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;