

Product datasheet for **CF805600**

Natriuretic Peptide Receptor A (NPR1) Mouse Monoclonal Antibody [Clone ID: OTI7H7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI7H7
Applications:	WB
Recommended Dilution:	WB 1:2000
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 746-1006 of human NPR1 (NP_000897) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	118.7 kDa
Gene Name:	natriuretic peptide receptor 1
Database Link:	NP_000897 Entrez Gene 18160 Mouse Entrez Gene 24603 Rat Entrez Gene 4881 Human P16066



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Background:

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]

Synonyms:

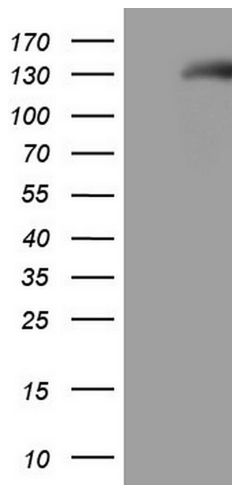
ANPa; ANPRA; GUC2A; GUCY2A; NPRA

Protein Families:

Druggable Genome, Protein Kinase

Protein Pathways:

Purine metabolism, Vascular smooth muscle contraction

Product images:

HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NPR1 (Cat# [RC209267], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NPR1 (Cat# [TA805600]). Positive lysates [LY424461] (100ug) and [LC424461] (20ug) can be purchased separately from OriGene.