



ANPRA Polyclonal Antibody

Catalog No	YP-Ab-06724
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	NPR1 ANPRA
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	ANPRA Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ANP A;ANPa;ANPR A;ANPRA;GC A;Guanylate cyclase A;GUC2A;GUCY2A; NPR1;NPR1 ANPRA;Atrial natriuretic peptide receptor 1 (EC 4.6.1.2) (Atrial natriuretic peptide receptor type A) (ANP-A) (ANPR-A) (NPR-A) (Guanylate cyclase A) (GC-A)
Observed Band	119 kDa
Calculated Molecular Weight	119 kDa
Cell Pathway	Membrane; Single-pass type I membrane protein.
Tissue Specificity	Blood,Kidney,Placenta,Retina,
Function	catalytic activity:GTP = 3',5'-cyclic GMP + diphosphate.,function:Receptor for atrial natriuretic peptide. Has guanylate cyclase activity on binding of ANF., miscellaneous:There seem to be at least three natriuretic peptide hormone receptors: two with guanylate cyclase activity (NPR1/ANP-A and NPR2/ANP-B) and one (NPR3/ANP-C) which is probably responsible for the clearance of natriuretic peptides from the circulation without a role in signal transduction., PTM:Phosphorylation of the protein kinase-like domain is required for full activation by ANP.,similarity:Belongs to the adenylyl cyclase class-4/guanylyl cyclase family.,similarity:Contains 1 guanylate cyclase domain., similarity:Contains 1 protein kinase domain.,

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 (A

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images