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Natriuretic Peptide Receptor A Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8111A

Specification

Natriuretic Peptide Receptor A Antibody (N-term) - Product Information

Application	**IHC-P,E**
Primary Accession	P16066
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

Natriuretic Peptide Receptor A Antibody (N-term) - Additional Information

Gene ID 4881

Other Names
Atrial natriuretic peptide receptor 1, Atrial natriuretic peptide receptor type A, ANP-A, ANPR-A, NPR-A, Guanylate cyclase A, GC-A, NPR1, ANPRA

Target/Specificity
This Natriuretic Peptide Receptor A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Natriuretic Peptide Receptor A.

Dilution
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Natriuretic Peptide Receptor A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Natriuretic Peptide Receptor A Antibody (N-term) - Protein Information

Name NPR1 (HGNC:7943)

Synonyms ANPRA

Function Receptor for the atrial natriuretic peptide NPPA/ANP and the brain natriuretic peptide NPPB/BNP which are potent vasoactive hormones playing a key role in cardiovascular homeostasis (PubMed:39543315). Plays an essential role in the regulation of endothelial cell senescence and vascular aging (PubMed:36016499). Upon activation by ANP or BNP, stimulates the production of cyclic guanosine monophosphate (cGMP) that promotes vascular tone and volume homeostasis by activation of protein kinase cGMP-dependent 1/PRKG1 and subsequently PRKAA1, thereby controlling blood pressure and maintaining cardiovascular homeostasis (PubMed:36016499).

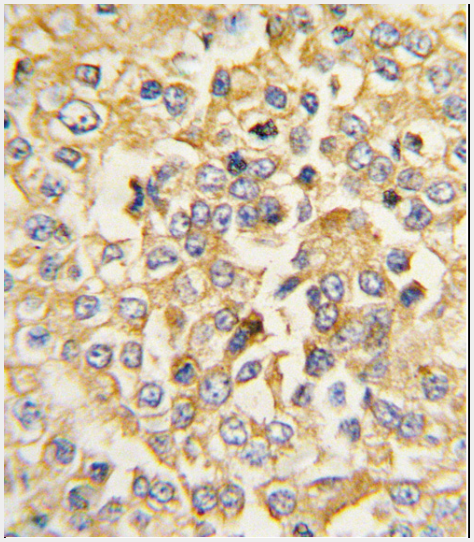
Cellular Location
Membrane; Single-pass type I membrane protein.

Natriuretic Peptide Receptor A Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Natriuretic Peptide Receptor A Antibody (N-term) - Images



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Natriuretic Peptide Receptor A (NPR1/ANPA) antibody (N-term) (Cat. #AP8111a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Natriuretic Peptide Receptor A Antibody (N-term) - Background

ANPA is a receptor for atrial natriuretic peptide. It exhibits guanylate cyclase activity on binding of ANF. There seem to be at least three ANP receptors: two with guanylate cyclase activity (ANPA and ANPB) and one (ANPC) which is probably responsible for the clearance of ANP from the circulation

without a role in signal transduction. This Type I membrane protein belongs to the adenylyl cyclase class-4/guanylyl cyclase family and contains 1 protein kinase-like domain.

Natriuretic Peptide Receptor A Antibody (N-term) - References

Takahashi, Y., et al., Biochem. Biophys. Res. Commun. 246(3):736-739 (1998). Pardhasaradhi, K., et al., Cell. Mol. Neurobiol. 14(1):1-7 (1994). Lowe, D.G., et al., EMBO J. 8(5):1377-1384 (1989).

Natriuretic Peptide Receptor A Antibody (N-term) - Citations

- Expression of natriuretic peptide-activated guanylate cyclases by cholinergic and dopaminergic amacrine cells of the rat retina.