

Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP8111a**Specification**

Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P16066](#)**Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody [AP8111a](/product/products/AP8111a) was selected from the N-term region of human ANPA . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide - 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](http://www.uniprot.org/citations/39543315)). Plays an essential role in the regulation of endothelial cell senescence and vascular aging (PubMed:[36016499](http://www.uniprot.org/citations/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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide - Images**Natriuretic Peptide Receptor A Antibody (N-term) Blocking peptide - 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) Blocking peptide - 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) Blocking peptide - Citations

- [Expression of natriuretic peptide-activated guanylate cyclases by cholinergic and dopaminergic amacrine cells of the rat retina.](#)