10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Npr1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14073A

Product Information

Application	WB, IHC-P, E
Primary Accession	P18293
Other Accession	NP_032753.5
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34652
Calculated MW	119109
Antigen Region	198-226

Additional Information

Gene ID	18160
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, Npra
Target/Specificity	This Mouse Npr1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 198-226 amino acids of mouse Npr1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Mouse Npr1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Npr1
Synonyms	Npra
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:35794311). Plays an essential role in the regulation of endothelial cell senescence and vascular aging. 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.

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

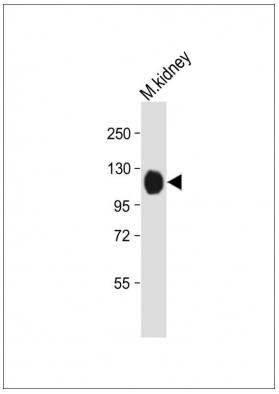
Background

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. Has guanylate cyclase activity upon binding of the ligand.

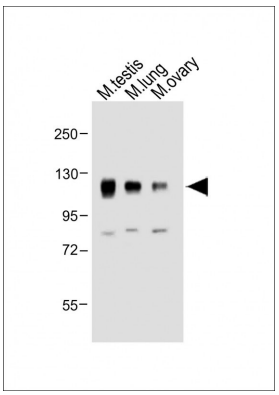
References

Madhani, M., et al. Am. J. Physiol. Heart Circ. Physiol. 299 (3), H827-H836 (2010) :
Panayiotou, C.M., et al. Br. J. Pharmacol. 160(8):2045-2054(2010)
Ropero, A.B., et al. Endocrinology 151(8):3665-3674(2010)
Tankersley, C.G., et al. Inhal Toxicol 22(8):695-707(2010)
Long, L., et al. Neuro Endocrinol. Lett. 31(1):126-130(2010)

Images

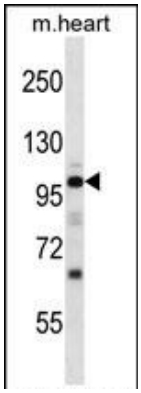


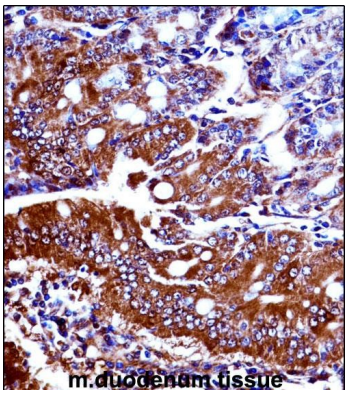
Anti-Mouse Npr1 Antibody (N-term) at 1:2000 dilution + Mouse kidney whole tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 119 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-Mouse Npr1 Antibody (N-term) at 1:2000 dilution Lane 1: Mouse testis whole tissue lysate Lane 2: Mouse lung whole tissue lysate Lane 3: Mouse ovary whole tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 119 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Mouse Npr1 Antibody (N-term) (Cat. #AP14073a) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the Npr1 antibody detected the Npr1 protein (arrow).





Mouse Npr1 Antibody (N-term) (AP14073a)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse duodenum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Npr1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.