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

BNP Rabbit pAb

Catalog # AP99047

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P16860
Other Accession	P16860
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14726
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BNP 32
Epitope Specificity	103-120/134
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the natriuretic peptide family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Brain natriuretic peptide (BNP), also known as B-type natriuretic peptide, is a hormone secreted by cardiomyocytes in the heart ventricles in response to stretching caused by increased ventricular blood volume. The 32-amino acid polypeptide BNP is secreted attached to a 76–amino acid N-terminal fragment in the prohormone called NT-proBNP (BNPT), which is biologically inactive. Once released, BNP binds to and activates the atrial natriuretic factor receptor NPRA, and to a lesser extent NPRB, in a fashion similar to atrial natriuretic peptide (ANP) but with 10-fold lower affinity. The biological half-life of BNP, however, is twice as long as that of ANP, and that of NT-proBNP is even longer, making these peptides better targets than ANP for diagnostic blood testing.

Additional Information

Gene ID	4879
Other Names	ANFB_HUMAN; NPPB; Brain natriuretic factor prohormone (preproBNP | proBNP); Gamma-brain natriuretic peptide; Iso-ANP; natriuretic peptide B; natriuretic peptide precursor B
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NPPB
Function	[Brain natriuretic peptide 32]: Cardiac hormone that plays a key role in mediating cardio-renal homeostasis (PubMed:1672777, PubMed:17372040, PubMed:1914098, PubMed:9458824). May also function as a paracrine antifibrotic factor in the heart (By similarity). Acts by specifically binding and stimulating NPR1 to produce cGMP, which in turn activates effector proteins that drive various biological responses (PubMed:1672777, PubMed:17349887, PubMed:17372040, PubMed:21098034, PubMed:25339504, PubMed:9458824). Involved in regulating the extracellular fluid volume and maintaining the fluid- electrolyte balance through natriuresis, diuresis, vasorelaxation, and inhibition of renin and aldosterone secretion (PubMed:1914098, PubMed:9458824). Binds the clearance receptor NPR3 (PubMed:16870210).
Cellular Location	[NT-proBNP]: Secreted Note=Detected in blood. [Brain natriuretic peptide 32]: Secreted. Note=Detected in blood.
Tissue Location	[Brain natriuretic peptide 32]: Detected in the cardiac atria (at protein level) (PubMed:2136732, PubMed:2138890) Detected in the kidney distal tubular cells (at protein level) (PubMed:9794555).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.