

Product Datasheet

BNP Antibody / Brain Natriuretic Peptide / NPPB (orb2634956)

Description	Natriuretic peptides comprise a family of three structurally related molecules: atrial natriuretic peptide (ANP), brain natriuretic peptide (BNP) and C-type natriuretic peptide (CNP). ANP and BNP act mainly as cardiac hormones, produced primarily by the atrium and ventricle, respectively, while the gene encoding C-type natriuretic peptide is expressed mainly in the brain. These peptides possess potent natriuretic, diuretic and vasodilating activities and are implicated in body fluid homeostasis and blood pressure control. ANP, BNP and CNP are highly homologous within the 17-residue ring structure formed by an intramolecular disulfide linkage. The genes which encode for ANP and BNP map to human chromosome 1p36.22. The gene which encodes for CNP maps to human chromosome 2q37.1.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	IHC-P
Immunogen	A recombinant protein fragment was used as the immunogen for the BNP antibody.
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.
Note	For research use only
Application notes	Optimal dilution of the BNP antibody should be determined by the researcher.
Formula	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide
Isotype	Mouse IgG1, kappa
Clonality	Monoclonal

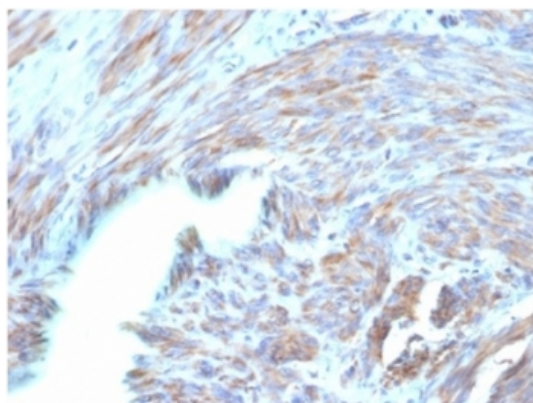
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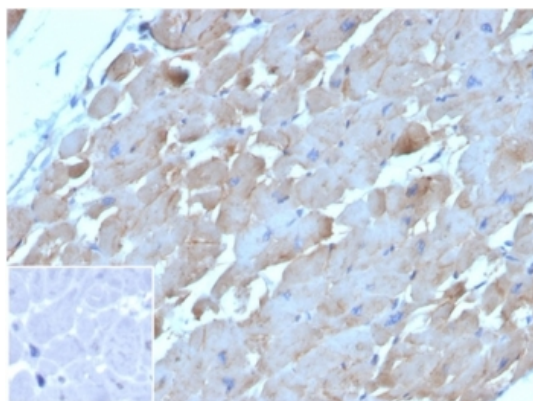
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Clone Number	NPPB/4493
Antibody Type	Primary Antibody
Uniprot ID	P16860
Hazard Information	This BNP antibody is available for research use only.
Dilution Range	Immunohistochemistry (FFPE): 1-2ug/ml
Expiration Date	12 months from date of receipt.



IHC staining of FFPE human uterus with BNP antibody (clone NPPB/4493). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



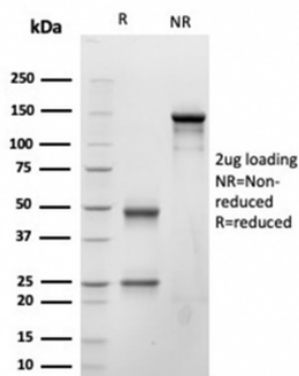
IHC staining of FFPE human heart tissue with BNP antibody (clone NPPB/4493). Negative control inset: PBS instead of primary antibody to control for secondary binding. HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

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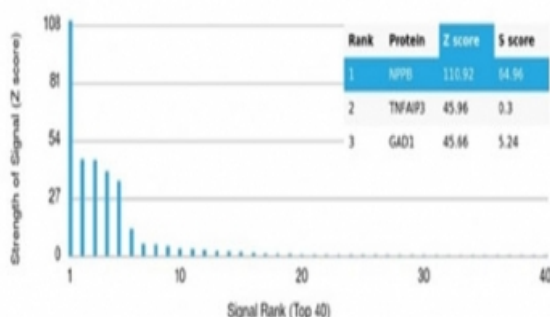
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SDS-PAGE analysis of purified, BSA-free BNP antibody (clone NPPB/4493) as confirmation of integrity and purity.

Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using BNP antibody (clone NPPB/4493). These results demonstrate the foremost specificity of the NPPB/4493 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

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