



BMA BIOMEDICALS



Peninsula Laboratories

---

## T-4210

### Rabbit anti Brain Natriuretic Peptide-45 (BNP-45) (rat) [UniProt: P13205]

The natriuretic peptide family consists of three biologically active peptides: atrial natriuretic peptide (ANP), brain (or B-type) natriuretic peptide (BNP), and C-type natriuretic peptide (CNP). Among these, ANP and BNP are secreted by the heart and act as cardiac hormones. Both ANP and BNP preferentially bind to natriuretic peptide receptor-A (NPR-A) and exert similar effects. Expression and secretion of ANP and BNP are stimulated by various factors and are regulated via multiple signaling pathways. The human BNP precursor proBNP is proteolytically processed to BNP<sub>1-32</sub> and N-terminal proBNP (NT-proBNP) within ventricular myocytes. Uncleaved proBNP as well as mature BNP<sub>1-32</sub> and NT-proBNP is secreted from the heart, and its secretion is increased in patients with heart failure.

This antibody was generated by immunization of rabbits with BNP-45 coupled to a carrier protein.

---

### TECHNICAL AND ANALYTICAL CHARACTERISTICS

<b>Lot number:</b>	n/a
<b>Host species:</b>	Rabbit IgG
<b>Quantity:</b>	400µg
<b>Format:</b>	Protein A affinity purified from antiserum, lyophilized, packaged under nitrogen. Reconstitute by adding 0.2ml distilled water. This stock solution contains 2mg/ml IgG, phosphate buffer saline pH 7.4 (PBS), and 0.02% (w/v) Thimerosal as a preservative.
<b>Stability:</b>	Original vial: at least one year at 4° - 8°C from date of delivery. Minimize repeated thawing and freezing of the antiserum by freezing aliquots at -20°C or below.
<b>Applications:</b>	This antibody has been tested and validated in ELISA against BNP-45. Other applications like immunohistochemistry (IHC), FACS or Western Blot may work as well. Optimal dilutions should be determined by the end user. Please see <a href="http://www.bma.ch">www.bma.ch</a> for protocols and general information.
<b>Immunogen:</b>	Synthetic peptide H-Ser-Gln-Asp-Ser-Ala-Phe-Arg-Ile-Gln-Glu-Arg-Leu-Arg-Asn-Ser-Lys-Met-Ala-His-Ser-Ser-Ser-Cys-Phe-Gly-Gln-Lys-Ile-Asp-Arg-Ile-Gly-Ala-Val-Ser-Arg-Leu-Gly-Cys-Asp-Gly-Leu-Arg-Leu-Phe-OH coupled to a carrier protein.

**Cross-Reactivity:**

<b>PEPTIDE:</b>	<b>%:</b>
BNP-45 (rat)	100
BNP-32 (rat)	100
BNP-32 (10-32) (rat)	100
Prepro-BNP (1-23) (rat)	0
Prepro-BNP (24-45) (rat)	0
BNP-32 (human)	0
BNP-26 (porcine)	0
ANF (rat)	0
ANF (1-28) (human, canine)	0
Endothelin-1 (human, porcine, dog, rat, mouse, bovine)	0
Angiotensin II	0

Related Products: S-1192: BNP-32 ELISA, high sensitivity, for extracted samples, (rat)  
T-4205: diluted antiserum (rat)  
T-4206: purified rabbit IgG (rat)  
T-4207: neat antiserum (rat)  
T-4211: BNP-45 neat antiserum (rat)

---

This product contains Thimerosal as a preservative and is intended for laboratory use and research purposes only. Purchase of this product does not include authorization to use it in diagnostic or therapeutic applications.

T-4210

rabbit IgG

1.3.2021