



BMA BIOMEDICALS



Peninsula Laboratories

T-4221

Rabbit anti C-type Natriuretic Peptide (32-53) (human, porcine, rat) [UniProt.: P23582, P18104, P55207]

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 BNP₁₋₃₂ and N-terminal proBNP (NT-proBNP) within ventricular myocytes. Uncleaved proBNP as well as mature BNP₁₋₃₂ and NT-proBNP is secreted from the heart, and its secretion is increased in patients with heart failure. The 22 amino acid CNP is generated by cleavage of its precursor natriuretic peptide precursor C, or NPPC. Unlike ANP and BNP, CNP does not have direct natriuretic activity, because it acts through the B-type natriuretic receptor NPRB, whereas ANP and BNP are selective for NPR-A.

This antibody was developed with serum from rabbits immunized with C-type Natriuretic Peptide (CNP) (32-53) coupled to a carrier protein.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

| | |
|----------------------|---|
| Lot number: | 029300-5 |
| Host species: | Rabbit IgG |
| Quantity: | 50ml |
| Format: | This polyclonal antibody is supplied as a lyophilized powder. The powder should be rehydrated with 50ml of RIA buffer. Upon reconstitution to 50ml total volume, the solution contains 0.1M sodium phosphate buffer (pH 7.4), 0.05M NaCl, 0.1% BSA, 0.01% NaN ₃ , and 0.1% Triton X-100. Store at 4° - 8°C. This should ensure antibody stability for approximately one month. |
| Stability: | 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. |
| Applications: | This antibody has been tested and validated in ELISA against C-type Natriuretic Peptide (CNP) (32-53). Other applications like immunohistochemistry (IHC), FACS or Western Blot may work as well. Optimal dilutions should be determined by the end user. Please see www.bma.ch for protocols and general information. |
| Immunogen: | Synthetic peptide H-Gly-Leu-Ser-Lys-Gly-Cys-Phe-Gly-Leu-Lys-Leu-Asp-Arg-Ile-Gly-Ser-Met-Ser-Gly-Leu-Gly-Cys-OH, (Disulfide bond) coupled to carrier protein. |

Cross-Reactivity:

| PEPTIDE | % |
|---|----------|
| CNP (32-53) (human, porcine, rat) | 100 |
| CNP (1-53) (porcine, rat) | 100 |
| CNP (1-29) (porcine, rat) | 0 |
| α -ANP 1-28 (human, rat, canine) | 0 |
| α -ANF (rat) | 0 |
| BNP-32 (porcine) | 0 |
| BNP-45 (rat) | 0 |
| Endothelin-1 (human, porcine) | 0 |
| Substance P | 0 |
| Thr-Ala-Pro-Arg-ANF (1-28) (human) | 0 |

Related Products: T-4222: anti CNP (32-53), purified IgG, host: rabbit
T-4223: anti CNP (32-53), neat antiserum, host: rabbit
S-1193: ELISA, high sensitivity for extracted samples
S-1512: ELISA, extraction-free for serum and plasma samples

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-4221

diluted antiserum

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