T-4201

Rabbit anti Brain Natriuretic Peptide-32 (BNP-32) (porcine) [UniProt: P07634]

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_{1-32} and N-terminal proBNP (NT-proBNP) within ventricular myocytes. Uncleaved proBNP as well as mature BNP_{1-32} 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-32 coupled to a carrier protein.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Lot number: A17654

Host species: Rabbit IgG

Quantity: 50ml diluted antiserum, lyophilized

Format: Each vial contains enough antiserum for 500 RIA tubes. The powder should be rehydrated with 50ml 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°C. This should ensure antibody stability for approximately one month.

Stability: Original vial: at least one year at 4° - 8ºC from date of delivery. Minimize repeated thawing and freezing of the antiserum by freezing aliquots at -20ºC or below.

Applications: This antibody has been tested and validated in ELISA against BNP-32. 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-Ser-Pro-Lys-Thr-Met-Arg-Asp-Ser-Gly-Cys-Phe-Gly-Arg-Arg-Leu-Asp-Arg-Ile-Gly-Ser-Leu-Ser-Gly-Leu-Gly-Cys-Asn-Val-Leu-Arg-Arg-Tyr-OH, (Disulfide bond) coupled to carrier protein.

Cross-Reactivity:

PEPTIDE:	%
BNP-32 (porcine)	100
BNP-26 (porcine)	100
BNP-32 (rat)	<0.001
BNP-32 (human)	0
ANP (1-29) (chicken)	0
α-ANP (1-28) (human, canine)	0
ANF (1-28) (rat)	0
β-ANF (1-28) (Dimer, Antiparallel) (human)	0
Atriopeptin I (rat)	0
Atriopeptin III (rat)	0
Substance P	0
VIP (human, bovine, porcine, rat)	0
Angiotensin II	0

Related Products: S-1190: ELISA, high sensitivity for extracted samples
T-4196: porcine anti BNP-26, purified IgG
T-4197: porcine anti BNP-26, neat antiserum

T-4201   diluted antiserum   28.9.2021