



BMA BIOMEDICALS



Peninsula Laboratories

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## S-1194

### Human BNP-32 ELISA [UniProt: P16860]

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 ELISA was developed with serum from rabbits immunized with BNP-32 coupled to a carrier protein.

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#### TECHNICAL AND ANALYTICAL CHARACTERISTICS

- Lot number:** A17483
- Host species:** Rabbit IgG
- Quantity:** 96 tests
- Format:** Extraction-free kit for human serum or plasma (EIAS type).
- Shelf-life:** One year from production date. Store refrigerated at 4° - 8°C.
- Applications:** This ELISA has been validated with the included reagents. It is intended to be used with samples of human origin (original protocol V, Ab1hr.Std2hr.BtON). For research use only.  
Please see [www.bma.ch](http://www.bma.ch) for protocols and general information.
- Range:** 0 - 5ng/ml
- Average IC50:** 0.2ng/ml
- Immunogen:** Synthetic peptide H-Ser-Pro-Lys-Met-Val-Gln-Gly-Ser-Gly-Cys-Phe-Gly-Arg-Lys-Met-Asp-Arg-Ile-Ser-Ser-Ser-Ser-Gly-Leu-Gly-Cys-Lys-Val-Leu-Arg-Arg-His-OH, (Disulfide bond) coupled to carrier protein.

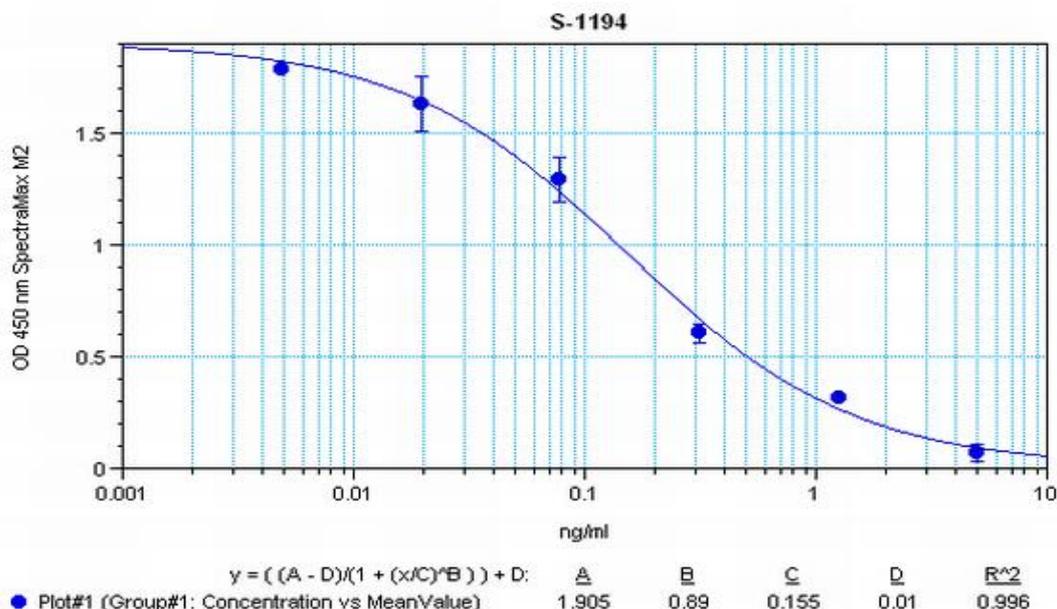
#### Cross-Reactivity:

PEPTIDE:	%:
BNP-32 (human)	100
BNP-32 (rat)	0.04
BNP-45 (rat)	0
BNP-26 (porcine)	0
ANF (1-28) (human)	0
Endothelin-1 (human, canine, porcine, rat, mouse, bovine)	0

## Cross-Reactivity (continued):

<b>PEPTIDE:</b>	<b>%:</b>
Angiotensin II	0
VIP (human, bovine, porcine, rat)	0

Typical titration curve of BNP-32 in a competitive ELISA with this antibody:



Suggested Preparation of Standards		
	ng/ml	Range: 0.00 to 5ng/ml
<b>Stock</b>	1000	
<b>S1</b>	5.00	Add 5µl Stock + 995µl diluent
<b>S2</b>	1.25	Add 200µl S1 + 600µl diluent
<b>S3</b>	0.31	Add 200µl S2 + 600µl diluent
<b>S4</b>	0.08	Add 200µl S3 + 600µl diluent
<b>S5</b>	0.02	Add 200µl S4 + 600µl diluent
<b>S6</b>	0.00	Add 200µl S5 + 600µl diluent
<b>S0</b>	0.00	500µl diluent

Related Products: S-1136: human BNP-32 ELISA, high sensitivity, for extracted samples.  
 T-4022: anti human BNP-32, purified rabbit IgG  
 T-4023: anti human BNP-32, neat rabbit antiserum

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.

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