



## PRODUCT DATA SHEET

**Product:** BNP (human recombinant)

**Cat. No.:** BC-258 (10 µg)

**Synonyms:**

B-type Natriuretic Protein; Brain Natriuretic Protein; Natriuretic peptides B precursor.

**Description:**

Human recombinant BNP is a protein secreted by the brain and the heart atria, stored mainly in cardiac ventricular myocardium. It can cause Natriuresis; Diuresis; Vasodilation; and inhibits secretion of Renin and Aldosterone.

BNP is a single non-glycosylated, polypeptide chain containing 32 amino acids, having a molecular mass of 3,464 kDa.

**Origin:**

Produced in *E. coli*.

**Format:**

Sterile filtered white lyophilized (freeze-dried) powder. Lyophilized from 0.4 mL PBS buffer containing 20 mM phosphate buffer and 0.6 mM sodium chloride. Purity >95% as determined by RP-HPLC, anion-exchange FPLC and silver-stained SDS-PAGE gel analyses. Dimers and aggregates are <1% as determined by silver-stained SDS-PAGE. Endotoxin: less than 0.1 ng/µg (1EU/µg) of human BNP.

**Reconstitution:**

Reconstitute in sterile 18 MΩ-cm H<sub>2</sub>O at not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Biological Activity:**

BNP is fully biologically active when compared to standards.

**Storage and Stability:**

Store desiccated below -18°C. Upon reconstitution BNP can be stored at 4°C for up to 7 days, and for future use below -18°C. For long term storage we recommend adding a carrier protein (0.1% HSA or BSA). Aliquot to avoid freeze / thaw cycles.

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.