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# BNP

Catalog # PVGS1049

## Product Information

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| **Primary Accession** | P16860 |
| **Species** | Human |
| **Sequence** | Ser103-His134 |
| **Purity** | > 97% as analyzed by SDS-PAGE<br>> 97% as analyzed by HPLC |
| **Endotoxin Level** | |
| **Expression System** | E. coli |
| **Theoretical Molecular Weight** | 3.5 kDa |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4. |
| **Reconstitution** | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. |
| **Storage & Stability** | Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles. |

## Additional Information

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| **Gene ID** | 4879 |
| **Other Names** | Natriuretic peptides B, Brain natriuretic factor prohormone, preproBNP, BNP(4-32), BNP(4-31), BNP(4-30), BNP(4-29), BNP(4-27), BNP(5-32), BNP(5-31), BNP(5-29), NPPB |
| **Target Background** | Natriuretic Peptide Precursor B acts as a cardiac hormone with a variety of biological actions including natriuresis, diuresis, vasorelaxation, and inhibition of renin and aldosterone secretion. It is thought to play a key role in cardiovascular homeostasis. Helps restore the body's salt and water balance. Improves heart function. |

## Protein Information

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| **Name** | NPPB |
| **Function** | [Brain natriuretic peptide 32]: Cardiac hormone that plays a key role in |

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| | mediating cardio-renal homeostasis (PubMed:1672777, PubMed:17372040, PubMed:1914098, PubMed:9458824). May also function as a paracrine antifibrotic factor in the heart (By similarity). Acts by specifically binding and stimulating NPR1 to produce cGMP, which in turn activates effector proteins that drive various biological responses (PubMed:1672777, PubMed:17349887, PubMed:17372040, PubMed:21098034, PubMed:25339504, PubMed:9458824). Involved in regulating the extracellular fluid volume and maintaining the fluid- electrolyte balance through natriuresis, diuresis, vasorelaxation, and inhibition of renin and aldosterone secretion (PubMed:1914098, PubMed:9458824). Binds the clearance receptor NPR3 (PubMed:16870210). |
| **Cellular Location** | [NT-proBNP]: Secreted Note=Detected in blood. [Brain natriuretic peptide 32]: Secreted. Note=Detected in blood. |
| **Tissue Location** | [Brain natriuretic peptide 32]: Detected in the cardiac atria (at protein level) (PubMed:2136732, PubMed:2138890) Detected in the kidney distal tubular cells (at protein level) (PubMed:9794555). |