

# BNP

Catalog # PVGS1049

## Product Information

---

<b>Primary Accession Species</b>	<a href="#">P16860</a> Human
<b>Sequence</b>	Ser103-His134
<b>Purity</b>	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
<b>Endotoxin Level</b>	
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	3.5 kDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS, pH 7.4.
<b>Reconstitution</b>	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.
<b>Storage &amp; Stability</b>	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

---

<b>Gene ID</b>	4879
<b>Other Names</b>	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
<b>Target Background</b>	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

---

<b>Name</b>	NPPB
<b>Function</b>	[Brain natriuretic peptide 32]: Cardiac hormone that plays a key role in

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.