

## Product datasheet for **KN206590**

### BNP (NPPB) Human Gene Knockout Kit (CRISPR)

#### Product data:

**Product Type:** Knockout Kits (CRISPR)  
**Format:** 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control  
**Donor DNA:** GFP-puro  
**Symbol:** BNP  
**Locus ID:** 4879  
**Components:** **KN206590G1**, BNP gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTCCTGCTCTTCTTGCATC  
**KN206590G2**, BNP gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTTGGAAACGTCCGGGTTAC  
**KN206590D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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 AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA  
 TGGGGGATCA TGTAACCTCG CTT

**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_002521](#)

**UniProt ID:**

[P16860](#)

**Synonyms:**

BNP

**Summary:**

This gene is a member of the natriuretic peptide family and encodes a secreted protein which functions as a cardiac hormone. The protein undergoes two cleavage events, one within the cell and a second after secretion into the blood. The protein's biological actions include natriuresis, diuresis, vasorelaxation, inhibition of renin and aldosterone secretion, and a key role in cardiovascular homeostasis. A high concentration of this protein in the bloodstream is indicative of heart failure. The presence of myocardial injury is a significant predictor of mortality in hospitalized coronavirus disease 2019 (COVID-19) patients, and there is evidence of increased levels of natriuretic peptide B in hospitalized non-survivor COVID-19 patients. The protein also acts as an antimicrobial peptide with antibacterial and antifungal activity. Mutations in this gene have been associated with postmenopausal osteoporosis. [provided by RefSeq, Aug 2020]

Product images:

