

## Product datasheet for **RC206590**

### BNP (NPPB) (NM\_002521) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** BNP (NPPB) (NM\_002521) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** BNP  
**Synonyms:** BNP; Iso-ANP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC206590 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATCCCCAGACAGCACCTTCCCGGGCGCTCCTGCTCCTGCTCTTCTTGCATCTGGCTTTCCTGGGAG  
 GTCGTTCCACCCGCTGGGCAGCCCCGGTTCAGCCTCGGACTTGGAAACGTCGGGTTACAGGAGCAGCG  
 CAACCATTTGCAGGGCAAAGTTCGGAGCTGCAGGTGGAGCAGACATCCCTGGAGCCCTCCAGGAGAGC  
 CCCCCTCCACAGGTGTCTGGAAGTCCCGGGAGGTAGCCACCGAGGGCATCCGTGGGCACCGCAAATGG  
 TCCTCTACACCCTGCGGGCACCACGAAGCCCCAAGATGGTGAAGGGTCTGGCTGCTTTGGGAGGAAGAT  
 GGACCGGATCAGCTCCTCCAGTGGCTGCAAAGTCTGAGCGGCAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC206590 protein sequence  
 Red=Cloning site Green=Tags(s)

MDPQTAPSRALLLLLFLHLAFLGGRSHPLGSPGSASDLETSGLQEQRNHLQGKLSLQVEQTSLEPLQES  
 PRPTGVVKSREVATEGIRGHRKMVLYTLRAPRSPKMQVQSGCFGRKMDRISSSSGLGCKVLRHH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6016\\_a01.zip](https://cdn.origene.com/chromatograms/mk6016_a01.zip)

**Restriction Sites:** SgfI-MluI

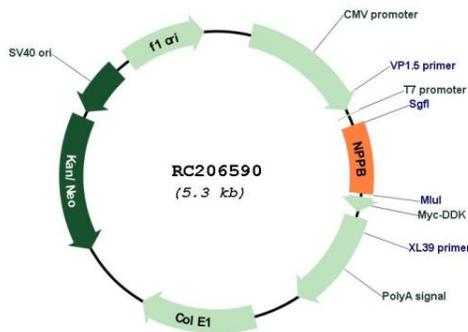


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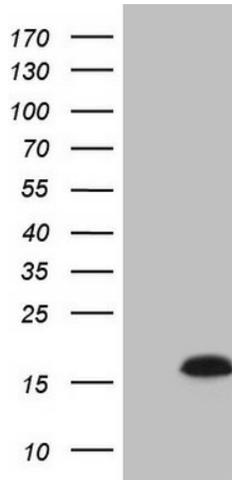


<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_002521.3</a>
<b>RefSeq Size:</b>	708 bp
<b>RefSeq ORF:</b>	405 bp
<b>Locus ID:</b>	4879
<b>UniProt ID:</b>	<a href="#">P16860</a>
<b>Cytogenetics:</b>	1p36.22
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Stem cell - Pluripotency
<b>MW:</b>	14.7 kDa
<b>Gene Summary:</b>	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]

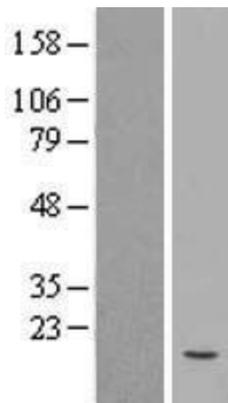
**Product images:**



Circular map for RC206590



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NPPB (Cat# RC206590, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NPPB (Cat# [TA809046])(1:2000). Positive lysates [LY400900] (100ug) and [LC400900] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400900]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206590 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).