

Product datasheet for RC205087

BNIP3 (NM_004052) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: BNIP3 (NM_004052) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: BNIP3
Synonyms: NIP3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC205087 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGCAGAACGGAGCGCCCGGATGCAGGAGGAGAGCCTGCAGGGCTCCTGGGTAGAAGTCACTTCA
 GCAATAATGGGAACGGGGCAGCGTTCCAGCCTCGTTTCTATTATAATGGAGACATGGAAAAATACT
 GCTGGACGCACAGCATGAGTCTGGACGGAGTAGCTCCAAGAGCTCTCACTGTGACAGCCACCTCGCTCG
 CAGACACCACAAGATACCAACAGAGCTTCTGAAACAGATACCCATAGCATTGGAGAGAAAAACAGCTCAC
 AGTCTGAGGAAGATGATATTGAAAGAAGGAAAGAAGTTGAAAGCATCTTGAAGAAAACTCAGATTGGAT
 ATGGGATTGGTCAAGTCGGCCGAAAATATCCCCCAAGGAGTTCTCTTTAAACACCCGAAGCGCAGC
 GCCACCCTCAGCATGAGGAACACGAGCGTCATGAAGAAAGGGGCATATTCTCTGAGAATTTCTGAAAG
 TTTTCTTCCATCTCTGCTCTCTCATTTGCTGGCCATCGGATTGGGGATCTATATTGGAAGCGCTC
 GACAACCTCCACCAGCACCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205087 protein sequence
 Red=Cloning site Green=Tags(s)

MSQNGAPGMQEESLQGSWVELHFSNNGNGGSPASVSIYNGDMEKILLDAQHESGRSSSKSSHCDSPPRS
 QTPQDTNRASETDTHSIGEKNSSQSEDDIERRKEVESILKKNSDWIWDWSSRPENIPKFLFKHPKRT
 ATLSMRNTSVMKKGIFSAEFLKVFLPSLLLHLLAIGLGIYIGRRLTTSTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6062_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004052

ORF Size: 582 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004052.2](#), [NP_004043.2](#)

RefSeq Size: 1535 bp

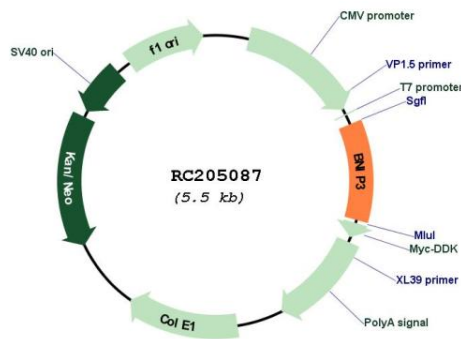
RefSeq ORF: 585 bp

Locus ID: 664

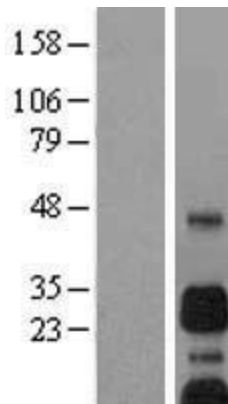
UniProt ID: [Q12983](#)
Cytogenetics: 10q26.3
Protein Families: Druggable Genome, Transmembrane
MW: 21.5 kDa

Gene Summary: This gene encodes a mitochondrial protein that contains a BH3 domain and acts as a pro-apoptotic factor. The encoded protein interacts with anti-apoptotic proteins, including the E1B 19 kDa protein and Bcl2. This gene is silenced in tumors by DNA methylation. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RC205087



Western blot validation of overexpression lysate (Cat# [LY418252]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205087 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).