

Product datasheet for RC200377

BNIP2 (NM_004330) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BNIP2 (NM_004330) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BNIP2
Synonyms:	BNIP-2; NIP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200377 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGGTGTGGAACCTAAAGAAGAATGGCAAGATGAAGATTTCCGATACCTTTACCAGAAGATGATA
GTATTGAAGCAGATATACTAGCTATAACTGGACCAGAGGACCAGCCTGGCTCACTAGAAGTTAATGGAAA
TAAAGTGAGAAAGAACTAATGGCTCCAGACATTAGCCTGACACTGGATCCTAGTGATGGCTCTGTATTG
TCAGATGATTTGGATGAAAGTGGGAGATTGACTTAGATGGCTTAGACACACCGTCAGAGAATAGTAATG
AGTTTGAGTGGGAAGATGATCTTCCAAAACCAAGACTACTGAAGTAATTAGGAAAGGCTCAATTACTGA
ATACACAGCAGCAGAGGAAAAAGAAGATGGACGACGCTGGCGTATGTTTCAGGATTGGAGAACAGGACCAC
AGGGTTGATATGAAGCAATTGAACCCTATAAAAAAGTTATCAGCCATGGGGGATATTATGGGGATGGAT
TAAATGCCATTGTTGTGTTGCTGTCTGTTTCATGCCTGAAAGTAGTCAGCCTAACTATAGATACCTGAT
GGACAATCTTTTTAAATATGTTATTGGCACTTTGGAGCTATTAGTAGCAGAAAACTACATGATAGTTTAT
TTAAATGGTGCAACAACCTCGAAGAAAAATGCCAGTCTGGGATGGCTCAGGAAATGTTATCAGCAAATTG
ATAGAAGTTACGAAAAATCTAAAATCCCTAATCATTGTACATCCTTCTGGTTTATCAGAACACTTCT
GGCTGTTACAAGACCATTTATTAGCTCGAAATTCAGCCAAAAAATTAGATACGTGTTAATTTGGCAGAA
CTAGCAGAACTTGTCCCATGGAATACGTTGGCATACCAGAATGCATAAAACAAGTTGATCAAGAACTTA
ATGGAAAAAAGATGAACCGAAAAATGAACAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200377 protein sequence
Red=Cloning site Green=Tags(s)

MEGVELKEEWQDEDFPIPLPEDDSIEADILAITGPEQPGSLEVNGNKVRKKLMAPDISLTLDPDSDGSVL
 SDDLDESGEIDLGLDTPSENSNEFEWEDDLPKPKTTEVIRKGSITEYTAEEKEDGRRWRMFRIGEODH
 RVDMKAIEPYKKVISHGGYYGDGLNAIVFVAVCFMPESSQPNRYRLMDNLFKYVIGTLELLVAENYMIIV
 LNGATRRKMPSLGWLKRCYQQIDRRRLRKNLKSLLIIVHPSWFIRTL LAVTRPFISSKFSQKIRYVFNLAE
 LAELVPMYVGIPECIKQVDQELNGKQDEPKNEQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6172_b02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004330

ORF Size: 942 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_004330.4](#)

RefSeq Size: 2533 bp

RefSeq ORF: 945 bp

Locus ID: 663

UniProt ID: [Q12982](#)

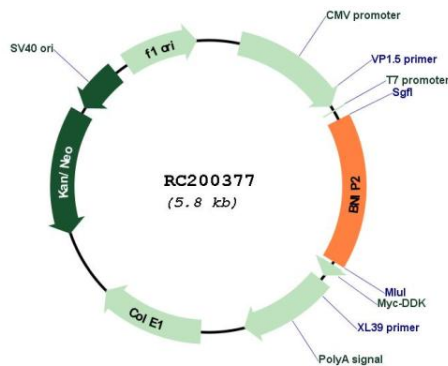
Cytogenetics: 15q22.2

Domains: SEC14

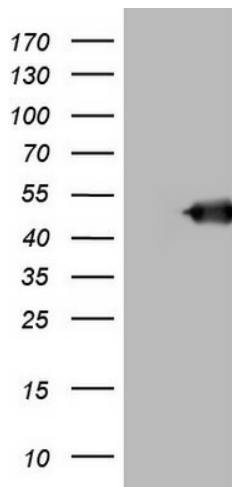
MW: 36 kDa

Gene Summary: This gene is a member of the BCL2/adenovirus E1B 19 kd-interacting protein (BNIP) family. It interacts with the E1B 19 kDa protein, which protects cells from virally-induced cell death. The encoded protein also interacts with E1B 19 kDa-like sequences of BCL2, another apoptotic protector. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

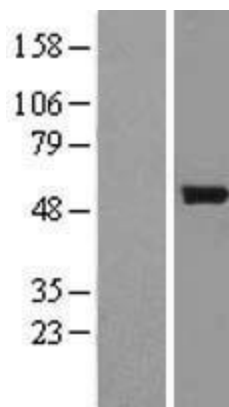
Product images:



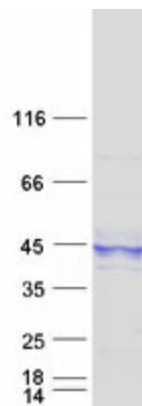
Circular map for RC200377



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BNIP2 (Cat# RC200377, 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-BNIP2 (Cat# [TA806500]). Positive lysates [LY401378] (100ug) and [LC401378] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401378]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200377 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BNIP2 protein (Cat# [TP300377]). The protein was produced from HEK293T cells transfected with BNIP2 cDNA clone (Cat# RC200377) using MegaTran 2.0 (Cat# [TT210002]).