OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR201757

Bnip3 (NM_009760) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bnip3 (NM_009760) Mouse 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:

>MR201757 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGCAGAGCGGGGAGGAGAACCTGCAGGGCTCCTGGGTAGAACTGCACTTCAGCAATGGCAATGGGA
GCAGCGTTCCAGCCTCCGTCTCTATTTATAATGGTGACATGGAAAAAATACTGTTGGATGCCCAGCATGA
ATCTGGACGAAGTAGCTCCAAGAGTTCTCACTGTGACAGCCCACCTCGCTCCCAGACACCACAAGATACC
AACAGAGCTGAAATAGACAGCCACAGCTTTGGCGAGAAAAACAGCACTCTGTCTGAGGAAGATTATATTG
AGAGAAGAAGAGAAGTTGAAAGTATCCTGAAGAAAAACTCAGATTGGATATGGGATTGGTCAAGTCGACC
AGAAAATATTCCCCCCAAGGAGTTCCTTTTTAAACACCCGAAGCGCACAGCTACTCTCAGCATGAGAAAC
ACAAGCGTTATGAAGAAAGGGGGAATTTTCTCAGCAGACTTTCTGAAGGTTTTCCTTCCATCTCTGTTAC
TGTCTCATCTGCTGGCCATTGGCTTGGGGATCTACATTGGAAGGCGTCTGACAACTTCCACTAGCACCTT
C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR201757 protein sequence
Red=Cloning site Green=Tags(s)

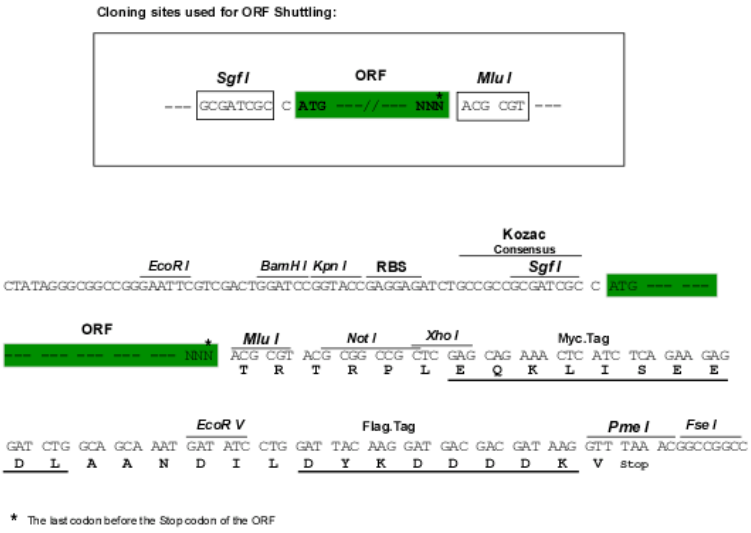
MSQSGEENLQGSWVELHFSNGNGSSVPASVSIYNGDMEKILLDAQHESGRSSSKSSHCDSPPRSQTPQDT
NRAEIDSHSFGEKNSTLSEEDYIERRREVESILKKNSDWIWDWSSRPENIPPKEFLFKHPKRTATLSMRN
TSVMKKGGIFSADFLKVFLPSLLLSHLLAIGLGIYIGRRLTTSTSTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009760

ORF Size: 561 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_009760.4, NP_033890.1

RefSeq Size: 1756 bp

RefSeq ORF: 564 bp

Locus ID: 12176

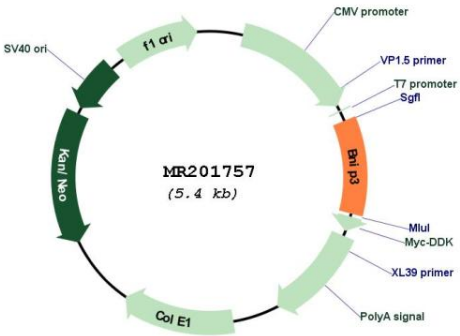
UniProt ID: O55003

Cytogenetics: 7 F4

MW: 21 kDa

Gene Summary: Apoptosis-inducing protein that can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2 (By similarity). Involved in mitochondrial quality control via its interaction with SPATA18/MIEAP: in response to mitochondrial damage, participates in mitochondrial protein catabolic process (also named MALM) leading to the degradation of damaged proteins inside mitochondria. The physical interaction of SPATA18/MIEAP, BNIP3 and BNIP3L/NIX at the mitochondrial outer membrane may play a critical role in the translocation of lysosomal proteins from the cytoplasm to the mitochondrial matrix (By similarity). The physical interaction of SPATA18/MIEAP, BNIP3 and BNIP3L/NIX at the mitochondrial outer membrane regulates the opening of a pore in the mitochondrial double membrane in order to mediate the translocation of lysosomal proteins from the cytoplasm to the mitochondrial matrix (By similarity). Plays an important role in the calprotectin (S100A8/A9)-induced cell death pathway (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201757