

## Product datasheet for **MG202460**

### **Bnip3I (NM\_009761) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Tag:** TurboGFP  
**Symbol:** Bnip3I  
**Synonyms:** C86132; D14ErtD719e; Nip3L; Nix  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG202460 representing NM\_009761  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGTCTCACTTAGTCGAGCCGCCGCCCTTGACAACAACAACAACACTGCGAGGAAGGGGAGCAGC  
CCCTGCCGCCGCCCTGGCCTCAACAGTTCCTGGGTGGAGCTACCCATGAACAGCAGCAATGGCAATGA  
GAATGGAAATGGGAAGAATGGGGGCTGGAGCAGTTCCTTCTCGTCTCCATCCACAATGGAGACATG  
GAGAAGATCCTCTGGATGCACAGCATGAGTCGGGACAGAGCAGCTCAAGAGGCAGTTCGCACTGTGACA  
GCCCTTCAACACAAGAAGATGGGCAGATCATGTTTGATGTTGAGATGCATACCAGCAGGGACCACAGCTC  
TCAGTCAGAAGAAGAAGTTGTAGAAGGAGAAAAGGAAGTTGAGGCTTTGAAGAAAAGTCGAGACTGGGT  
TCAGACTGGTCCAGTAGACCCGAAAACATCCCACCAAAGAGTTCATTTAGACACCCTAAACGTGCTG  
CGTCTCTAAGCATGAGGAAGAGTGGAGCCATGAAGAAAGGGGCATTTTCTCTGCAGAGTTCCTAAAAGT  
TTTCATCCCATCTCTCTTCTCTCATGTGCTGGCCTTGGGCTCGGCATCTATATTGAAAACGACTG  
AGCACACCTTCTGCCAGCACCTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG202460 representing NM\_009761  
Red=Cloning site Green=Tags(s)

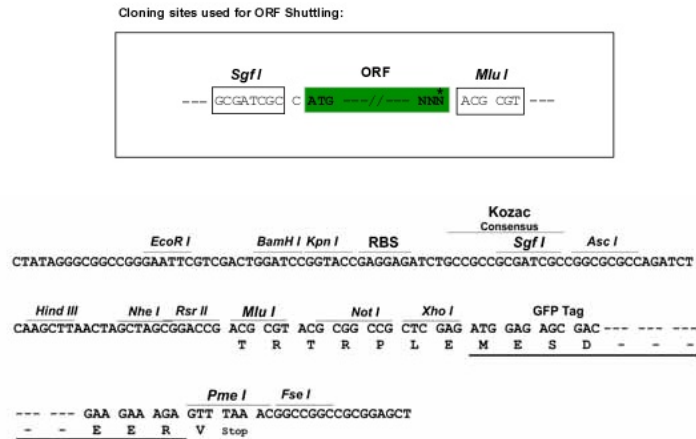
MSHLVEPPPLHNNNNCEEGEQPLPPPAGLNSSWVELPMNSSNGNENGNKNGGLEHVPSSSIHNGDM  
EKILLDAQHESGQSSSRGSSHCDSPSPQEDGQIMFDVEMHTSRDHSSQSEEEVVEGEKEVEALKKSADWV  
SDWSSRPENIPPKFHFHRPKRAASLSMRKSGAMKGGIFSAEFLKVFIPSLFLSHVLALGLGIYIGKRL  
STPSASTY

**TRTRPLE** - GFP Tag - V



**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_009761

**ORF Size:** 654 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

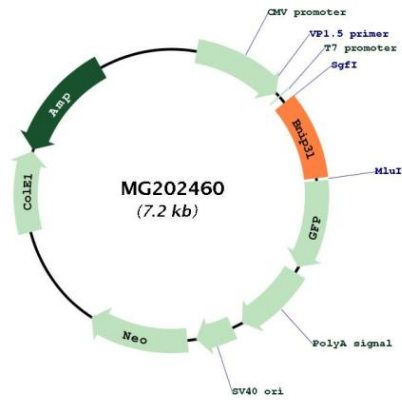
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<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_009761.3</a> , <a href="#">NP_033891.1</a>
<b>RefSeq Size:</b>	3183 bp
<b>RefSeq ORF:</b>	657 bp
<b>Locus ID:</b>	12177
<b>UniProt ID:</b>	<a href="#">Q9Z2F7</a>
<b>Cytogenetics:</b>	14 34.6 cM
<b>Gene Summary:</b>	Induces apoptosis. Interacts with viral and cellular anti-apoptosis proteins. Can overcome the suppressors BCL-2 and BCL-XL, although high levels of BCL-XL expression will inhibit apoptosis. Inhibits apoptosis induced by BNIP3. 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 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). May function as a tumor suppressor (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG202460