

Product datasheet for **MG209117**

Ddi2 (BC031491) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddi2 (BC031491) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ddi2
Synonyms:	1110056G13Rik; 1700027M01Rik; 9130022E05Rik; AI604911; AU040698
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209117 representing BC031491
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGTCATCATTGCCGACTTCAGATGGGTTTGACCATCCAGCTCCTTCAGGGCAGAGTCTGAGGTTGGTA
 GCCCGACGAGTCTCGCTCGCTCTGTTTCTGCTTCGCTCGCCATCAAGCCCGTGACCCCAATAGCAT
 TGAATCTCTAGCTATGGAGGCTACGAAGCTTCAGCTGAATTCAGACAACTCTAAGAAAAACAGACCT
 CCTCTCTGCAGGTTCTTCTGACCTTGCTTCCTCAGCAGAGCAGAGTCTAGCCATGCCTTTCCATAAGT
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 GTATCTCCACACAAGACAGGACGCTAGTTAACTCTCACAACACTGGGATGCGGAGCCACAGATATTT
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 GCTCATCTTCCAGTGCAGAGAAGGGTCTTCCAGCTTCAGGACTCTGTAGCTGTCCATGCTCAGAAGCCC
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 CATCAAGAGCCCTAGTGTAGCACATCTCGCTTCAGATAATCCCACTATGGAAGTGAGACATTACAGTCT
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 AACCAAGTGTTCAGACCTTTAGGAAGAAGGGTCCAAAGTGTGATTTGACCCCTAGTGACCACTACTC
 ACAAGGCTCTGTCAACAGGCCACCTCTGAATCAGGAAAGACAGAAATCGTAGGAAGTCCCTTGTGCT
 GCGGTAGAAGATGAAGCATCCACTAGCTTTGAAGGTCTGGGTGATGGCTGTACCTGACCGAGAAGATG
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 GTTGCCCTGCACCTCAGGGGTAGAAATAGCACCTGAACCTGCAGCAAGTGAAGGTGCCACAGTCAGCCT
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 CCCGTAGTGGATTGGACCAACCTCCACACAGTCTTGTCCACCCCTCCGTTCTCCACCGTTCATCTT
 TCCTGCTGCAGATGTTGACAGGATCTTGGTCCCGGCTTCACTCTGCAGGAAGCGCTCGGGGCTCTGCAT
 CGAGTTGGTGGGAATGCAGACCTTGCCCTTCTGTTTTGTAGCAAAGAACATTGTAGTCCCAACA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG209117 representing BC031491
 Red=Cloning site Green=Tags(s)

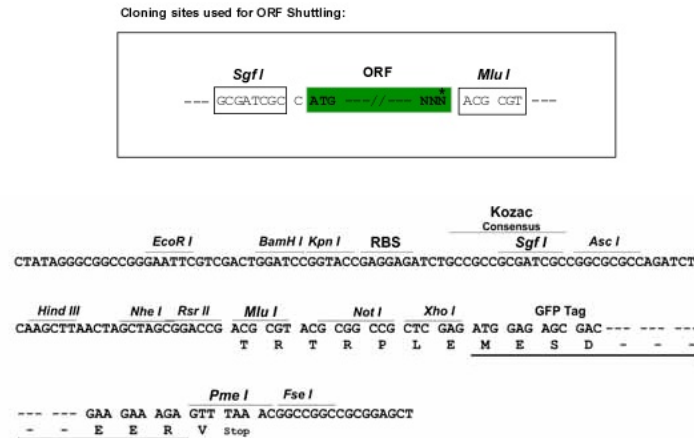
MSSLPTSDFDHPAPSGQSPEVGSPTSLARSVSASVCAIKPGDPNSIESLAMEATKASAEFQTNSSKTD
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 AEEKSWHPENQTPSPVNLQQHRETGSVQREAGQSVQDQGCCLDAEDLELHEEVVSLEALRKELQRH
 AHLPSAEKGLPASGLCSCPCSEALMEVDTAEQSLVAMCSSTGRQDAVIKSPVAHLASDNPTMEVETLQS
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 SCKPASEESPEHVTQSEIGAESQPSVSDLGRRVQSVHLTPSDQYSQGSCHQATSESGKTEIVGTAPCA
 AVEDEASTSFEGLDGLSPDREDVRRSTESARKSCSVAITSAKLSEQLPCTSGVEIAPELAASEGAHSQP
 SEHVHNPGRPDPETSSVCPGAGLPRSGLDQPPTQSLSTPSVLPPFIFPAADVDRILGAGFTLQEALGALH
 RVGGNADLALLVLLAKNIVVPT

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: BC031491

ORF Size: 1746 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: [BC031491](#)

RefSeq Size: 2307 bp

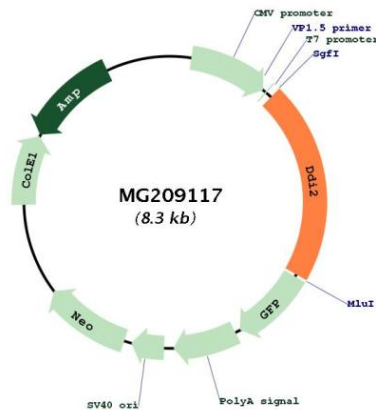
RefSeq ORF: 1748 bp

Locus ID: 68817

Cytogenetics: 4 E1

Gene Summary: Aspartic protease that mediates the cleavage of NFE2L1/NRF1 at 'Leu-104', thereby promoting release of NFE2L1/NRF1 from the endoplasmic reticulum membrane. Ubiquitination of NFE2L1/NRF1 is a prerequisite for cleavage, suggesting that DDI2 specifically recognizes and binds ubiquitinated NFE2L1/NRF1. Seems to act as a proteasomal shuttle which links the proteasome and replication fork proteins like RTF2. Required, with DDI1, for cellular survival following replication stress. Together or redundantly with DDI1, removes RTF2 from stalled forks to allow cell cycle progression after replication stress and maintains genome integrity. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209117