

Product datasheet for **MG227024**

Dnajc3 (NM_008929) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dnajc3 (NM_008929) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dnajc3
Synonyms:	AA408985; AU067833; Dnajc3a; Dnajc3b; mp58; p58; p58IPK; Prkri
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG227024 representing NM_008929
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGGCCCCGGCTCGGTGGGACGCCGGCTGGGCGCGGTGTTCCCGTTCCTGCTGGTCTGGTGACC
 TGCAGTACGAAGCGCTGAGTGTGGAGTAAATGCGGATGTGGAGAAGCATCTGAATTGGGAAGAAATT
 ACTCGCAGCCGGACAGCTAGCCGACGCCTTATCACAGTTTCACGCTGCAGTTGATGGTGACCCCGATAAC
 TATATCGCATACTATAGGAGAGCGACCGTCTTCTTAGCCATGGGGAAATCCAAAGCAGCCCTGCCCGACC
 TCACCAAAGTGATTGCGCTGAAGATGGACTTTACTGCCGCAAGACTACAGAGAGGTCACCTACTGCTCAA
 ACAAGGGAAGCTTGACGAAGCAGAAGACGATTTCAAGAAAGTGCTCAAATCTAACCCAGTGAGCAGGAG
 GAGAAGGAAGCCGAGTCTCAGCTTGTAAAAGCTGACGAGATGCAGCGGCTGCGCTCCAAGCGCTCGACG
 CCTTTGACGGTGGCGATTACACTGCTGTATAACCTTCCTTGATAAGATTTTAGAGGTTTGTGTTGGGA
 TGCAGAATTGCGTGAAGTGCAGCAGAATGCTTCATAAAGGAAGGAGAGCCAGGAAAGCCATCAGCGAC
 TTAAGGCTGCTTCAAAGCTGAAGAGTGACAACACAGAGGCGTTTTACAAATCAGCACACTCTACTACC
 AGCTAGGAGACCATGAGCTGTCTCTCAGTGAAGTTCGTGAATGTCTGAACTTGACCAGGATCACAAAGCG
 GTGTTTTGCACACTATAAGCAAGTGAAGAACTTAACAAGCTGATTGAGTCAGCTGAAGAGCTGATCCGA
 GATGGCAGATACACAGATGCAACCAGCAAATATGAATCAGTCAAGAAAACAGAGCCAGTGTGCTGAGT
 ACACAGTGCCTCGAAGGAGAGGATCTGCCACTGCTTCTAAGGATGAGAAGCCGTGGAAGCCATTAG
 GATATGTTCTGAAGTTTACAGATGGAGCCCGACAATGTGAATGCTCTGAAAGACCGAGCCGAGGCGCTAC
 TTAATAGAGGAAATGTACGATGAAGCCATTGAGGATTATGAAGCTGCTCAGGAGCACAATGAAAATGACC
 AGCAGATTCGGGAAGGCTTAGAGAAAGCCAGCGTTACTGAAGCAGTCACAGAAACGAGATTATTATAA
 AATCTTGGGAGTAAAAAGAAATGCCAAAAACAAGAAATCATTAAGCATACCGAAAGTTAGCACTGCAG
 TGGCATCCAGATAATTTCCAGAATGAAGAAGAAAAAGAAAAAGCAGAGAAAAAGTTTCATTGACATAGCAG
 CTGCTAAAGAAGTCTCTCAGACCCAGAAATGAGAAAGAAGTTTGTGATGATGGAGAAGATCTCTTGATGC
 AGAGAGTCAACAAGGAGGTGGTGGCAACCCCTCCACCGAAGTTGGAAGTTCATGGCAAGGTTTAAACCC
 TTCAGCTCAGGCGGACCGTTCAGATTTAAGTTCACCTTCAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227024 representing NM_008929
 Red=Cloning site Green=Tags(s)

MVAPGVSRLGAVFPFLLVLDLQYEGAECGVNADVEKHLELGKLLAAGQLADALSQFHAAVDGDNDN
 YIAYYRRATVFLAMGKSKAALPDLTKVIALKMDFTAARLQRHLLKQGLDEAEDDFKKVLSNPSEQE
 EKEAESQLVKADEMQRLSQALDAFDGADYTAITFLDKILEVCVWDAELRELRAECFIKEGEPKAI
 SDLKAASKLSDNTEAFYKISTLYYQLGDHELSEVRECLKLDQDHRKCFAHYKQVKLNKLI
 ESAEELIR DGRYTDATSKYESVMKTEPSVAEYTVRSKERICHCF SKDEKPV
 EAIRICSEVLQMEPDNVNALKDRAEAY LIEEMYDEAIQDYEAQEHNENDQQIREGLEKAQRLKQSQKRDY
 YKILGVKRNAAKQEI
 IKAYRKLALQ WHPDNFQNEEEKKA
 EKFIIDIAAAKEVLSDP
 EMRKKFDDGEDPLDAESQGGGPNP
 FHRWSNSWQGFNP FSSGGPFRFKFHFN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI
BamHI *KpnI*
RBS
Kozac
Consensus
SgfI
AscI

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

HindIII
NheI *RsrII*
MluI
NotI
XhoI
GFP Tag

CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

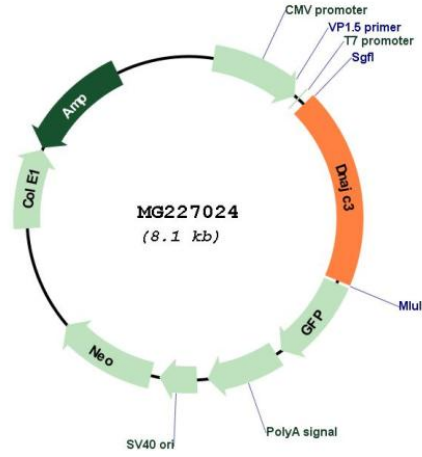
T R T R P L E
M E S D - - -

PmeI
FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

Plasmid Map:



ACCN: NM_008929
 ORF Size: 1512 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 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).
Reconstitution Method:	<ol style="list-style-type: none"> 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_008929.2
RefSeq Size:	5190 bp
RefSeq ORF:	1515 bp
Locus ID:	100037258
UniProt ID:	Q91YW3
Cytogenetics:	14 E4
Gene Summary:	Involved in the unfolded protein response (UPR) during endoplasmic reticulum (ER) stress. Acts as a negative regulator of the EIF2AK4/GCN2 kinase activity by preventing the phosphorylation of eIF-2-alpha at 'Ser-52' and hence attenuating general protein synthesis under ER stress, hypothermic and amino acid starving stress conditions (PubMed:25329545). Co-chaperone of HSPA8/HSC70, it stimulates its ATPase activity. May inhibit both the autophosphorylation of EIF2AK2/PKR and the ability of EIF2AK2 to catalyze phosphorylation of the EIF2A. May inhibit EIF2AK3/PERK activity (By similarity).[UniProtKB/Swiss-Prot Function]