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Product datasheet for MG225146

Ddb2 (NM_028119) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddb2 (NM_028119) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ddb2
Synonyms:	2610043A19Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG225146 representing NM_028119
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCCCAAGAAATGCCCAGAAACCCAGAAGTCCCCCGACGTTGCGGTGCTCCTCAGGAGCAAAAGTC
GCAGAGGTCCTCAGGAGCTGGAGCCCGAAGCCAAGAAGCTGCGTGTGCAGGGTCCCGTTTCTAGCAGGAC
ATGTGAGTCGTGCTGCCTTCTGGCAGAGTTGTCCAGCCTGCAGATCCCTTCACGGAGTAGCAGCATTGTC
AGGGATCTTTACCAGCATAAGTTGGGCAAAGCCACCTGGTCATCACTACAGCAGGGTCTGCAGAAGTCCT
TTTTGCACTCTCTAGCTTCTTACCAGGTATTCCGAAAAGCTGCCCCCTTTGACAGGAGGACTACGTCCTT
GGCATGGCACCCGACTCATCCCAGTACCCTGGCTGTGGGCTCCAAAGGGGGAGATATTATGATCTGGAAC
TTTGGCATCAAGGACAAACCTATCTTCCTTAAAGGGATTGGAGCTGGAGGAAGCATCACTGGGCTGAAGT
TTAACCATCTCAATACCAACCAGTTTTTTGCCTCCTCAATGGAGGGAACAACCAGGCTGCAGGATTTTAA
AGGCAACATTCTCAGAGTTTATACCAGCTCAAACTCTTGCAAGGTCTGGTTTTGCAGCCTTGATGTTTCT
GCCAAGAGCAGAGTGGTGGTTACAGGAGACAATATGGGACATGTGATCCTGTTGAGCACAGATGGCAAGG
AGCTTTGGAACCTCCGAATGCACAAGAAGAAAGTAGCCCACGTGGCCCTGAATCCCTGCTGTGATTGGCT
TCTGGCCACAGCCTCCATAGATCAAACAGTGAAGATTTGGGACCTGCGCCAAATTAAAGGGAAAGACAGC
TTCCTCTACTCACTGCCTCACAGGCATCCTGTCAATGCAGCTTGTTTTAGCCCAGATGGAGCTCGGCTCC
TGACTACTGACCAGAACAATGAGATTCGGGTTTACTCTGCCTCCCAGTGGGATAGCCCCCTGAATCTGAT
CTCCCACCCTCACCGCCATTTTCAGCACCTCACACCCATCAAGGCGACCTGGCATTCACGGCACAACCTC
ATTGTTGTGGGCCGATACCCAGATCCTAATCTTAAAAGTTGTGTTCCCTATGAACTAAGGACAATAGATG
TGTTTGATGGAAGCTCAGGGAAGATGATGTGTCAGCTCTATGATCCAGGATACTCCGGTATTACTTCGCT
CAATGAGTTCAATCCTATGGGAGACACACTGGCCTCTACTATGGGTTATCATATTCTCATTTGGAGCCAA
GAGGAAGATGGGTCACAGAAAGATCATGAAAGACTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

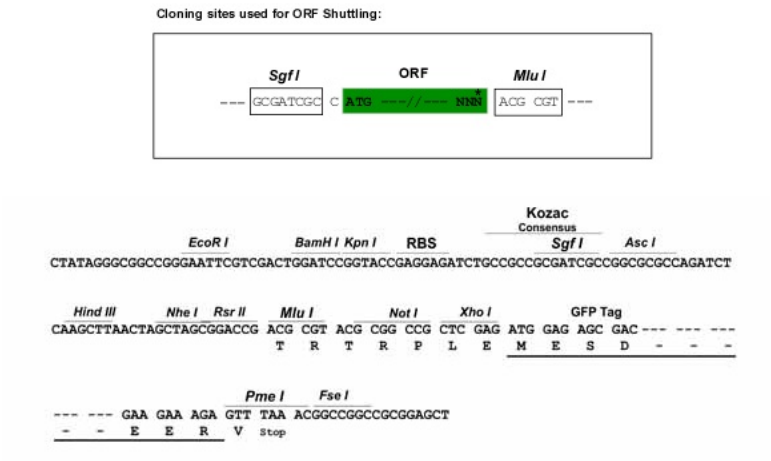
>MG225146 representing NM_028119
Red=Cloning site Green=Tags(s)

MAPKKCPETQKSPDVAVLLRSKSRRGPQELEPEAKKLRVQGPVSSRTCESCCLLAELSSLQIPSRSSSIV
RDLYQHKLGKATWSSLQQGLQKSFLHSLASYQVFRKAAPFDRRTTSLAWHPTHPSTLAVGSKGGDIMIWN
FGIKDKPIFLKGIGAGGSITGLKFNHLNTNQFFASSMEGTTRLQDFKGNILRVYTSSNSCKVWFCSLDVS
AKSRVVVTGDNMGHVILLSTDGKELWNLRMHKKKVAHVALNPCCDWLLATASIDQTVKIWDLRQIKGKDS
FLYSLPHRHPVNAACFSPDGARLLTTDQNNEIRVYSASQWDSPLNLISHPHRHFQHLTPIKATWHSRHNL
IVVGRYPDPNLKSCVPYELRTIDVFDGSSGKMMCQLYDPGYSGITSLNEFNPMGDTLASTMGYHILIWSQ
EEDGSQKDHERL

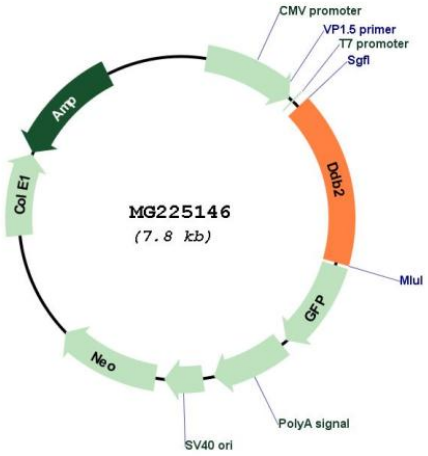
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_028119

ORF Size:	1296 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_028119.5, NP_082395.2
RefSeq Size:	1929 bp
RefSeq ORF:	1299 bp
Locus ID:	107986
UniProt ID:	Q99J79
Cytogenetics:	2 E1
Gene Summary:	Required for DNA repair. Binds to DDB1 to form the UV-damaged DNA-binding protein complex (the UV-DDB complex). The UV-DDB complex may recognize UV-induced DNA damage and recruit proteins of the nucleotide excision repair pathway (the NER pathway) to initiate DNA repair. The UV-DDB complex preferentially binds to cyclobutane pyrimidine dimers (CPD), 6-4 photoproducts (6-4 PP), apurinic sites and short mismatches. Also appears to function as the substrate recognition module for the DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex DDB1-CUL4-ROC1 (also known as CUL4-DDB-ROC1 and CUL4-DDB-RBX1). The DDB1-CUL4-ROC1 complex may ubiquitinate histone H2A, histone H3 and histone H4 at sites of UV-induced DNA damage. The ubiquitination of histones may facilitate their removal from the nucleosome and promote subsequent DNA repair. The DDB1-CUL4-ROC1 complex also ubiquitinates XPC, which may enhance DNA-binding by XPC and promote NER. [UniProtKB/Swiss-Prot Function]