

OriGene Technologies, Inc.

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Product datasheet for MR225146L4V

Ddb2 (NM_028119) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Ddb2 (NM_028119) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Ddb2
Synonyms:	2610043A19Rik
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_028119
ORF Size:	1296 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR225146).
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 028119.5, NP 082395.2</u>
RefSeq Size:	1929 bp
RefSeq ORF:	1299 bp
Locus ID:	107986
UniProt ID:	<u>Q99J79</u>
Cytogenetics:	2 E1



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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]

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