

## Product datasheet for **MR221051**

### **Dcp2 (NM\_027490) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dcp2 (NM_027490) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dcp2
Synonyms:	2410015D23Rik; 5730537H01Rik; AL118268
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR221051 representing NM\_027490  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCCAAACGCCTGGAGATTCCTCGCAGCGTCTGGATGATCTCTGCAGCCGATTTATTTTGCATA  
 TTCCCAGTGAAGAAAGAGACAATGCGATCCGAGTGTGCTTCCAGATTGAACTTGCCATTGGTTTTACTT  
 GGATTTCTACATGCAACAACACACAGGATTACCTCAGTGCGGGATAAGAGACTTTGCCAAAGCTGTTTTT  
 AGTCACTGTCCATTTCTGCTGCCACAAGGTGAAGATGTGGAAAAGATTTGGATGAATGGAAGGAATATA  
 AAATGGGAGTCCCGACTTACGGTCAATTATTCTCGATGAGACTGGAGAATGTACTGTGGTTACGGG  
 GTACCTGGCAAAGTCAAGCTGGGATCCCAAAGGAAAAGTAAATAAAGAAGAGGCGCCTCATGACTGT  
 GCGGCGAGAGAGGCTTTCGAGGAACTGGTTTTGATATAAAAGACTATATTTGTAAGGATGATTACATTG  
 AACTGCGAATCAATGACCAGCTTGTCTGCTGTACATCATTCCAGGAGTCCCAAAGACACAAAATTTAA  
 CCCCCAAAACCAGAAGAGAAATTAGGAATATTGAGTGGTCTCCATTGAGAAATTGCCCTGTCATAGAAAT  
 GACATGACTCCCAAGTCCAAGCTTGGCTTGGCACCTAATAAGTTTTTTATGGCCATTCCCTTTATCAGAC  
 CACTAAGGGACTGGCTGTCTCGAAGATTTGGAGATTCCTCGGACAGTGACAATGGGTTTTCTCAGCTGG  
 TAGCACACCAGCTAGACCACCGTGGAGAAATTGAGTCGAACAAAATTCGCCACAGCCAGCAGCTGTTT  
 CCTGAAGGTTCCCGAGTGACCAGTGGGTTAAGCACCGGCAGCCACTGCAGCAGAAGTCACACAGTAACC  
 ACGGGGAGGTGTCGGACCTTCTCAAAGCAAAGAATCAAAATATGAGAGGGGATGGCAGAAAAACAGTATCA  
 AGACTCACCTAATCAAAGAAGAGAGCGAACGGAGTCCATGGTCAGCCGGCAAAGCAGCAGAATCCCTTG  
 GTGAAATGTGAAAAGAAGCTGCATCCACGAAACTTCAGGACAACTTCGAGACAGATGCCACATGTGACC  
 TGCCTTGTCTGGTGAAGAGCCGTCGGTGAACATGCTGAGGGACATTCTGTGGCATGCAACGGACATTG  
 CAAGTCCCATTTTCATCCAGAGCCTTTCTGAGTTTCAAGTTTGACCAAAATGCTATAATGAAAATCTTG  
 GACCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR221051 representing NM\_027490  
 Red=Cloning site Green=Tags(s)

MEPKRLEIPGSVLDLCSRFLHIPSEERDNAIRVCFQIELAHWFYLD FYMQNTPGLPQCGIRDFAKAVF  
 SHCPFLLPQGEDVEKILDEWKEYKMGVPTYGAIILDETLNVLVQGYLAKSGWGFPGKVNKEEAPHDC  
 AAREVFEETGFDIKDYICKDDYIELRINDQLARLYIIPGVPKDTKFNPKTRREIRNIEWFSIEKLPCHRN  
 DMTPKSKLGLAPNKFMAIPFIRPLRDWLSRRFGDSSSDSNGFSSAGSTPARPTVEKLSRTKFRHSQQLF  
 PEGSPSDQWVKHRQPLQKSHSNHGEVSDLLKAKNQNMGRNGRKQYQDSPNQKRRANGVHGQPAKQQNPL  
 VKCEKHLHPRKLQDNFETDATCDLPCSGEEPSVEHAEGHSVACNGHCKFPFSSRAFLSFKFDQNAIMKIL  
 DL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1946\\_e05.zip](https://cdn.origene.com/chromatograms/ja1946_e05.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_027490

ORF Size: 1266 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).

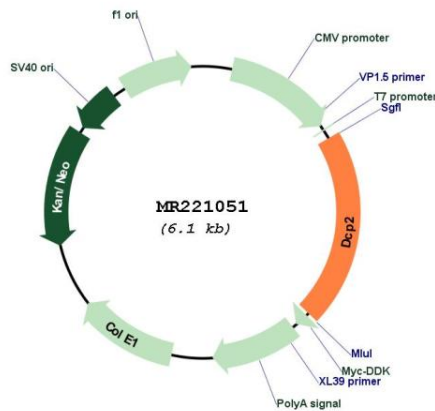
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_027490.1](#), [NP\\_081766.1](#)

RefSeq Size: 8643 bp  
 RefSeq ORF: 1269 bp  
 Locus ID: 70640  
 UniProt ID: [Q9CYC6](#)  
 Cytogenetics: 18 B3  
 MW: 48.8 kDa

**Gene Summary:** Decapping metalloenzyme that catalyzes the cleavage of the cap structure on mRNAs (PubMed:21070968). Removes the 7-methyl guanine cap structure from mRNA molecules, yielding a 5'-phosphorylated mRNA fragment and 7m-GDP (PubMed:21070968). Necessary for the degradation of mRNAs, both in normal mRNA turnover and in nonsense-mediated mRNA decay (By similarity). Plays a role in replication-dependent histone mRNA degradation (By similarity). Has higher activity towards mRNAs that lack a poly(A) tail (PubMed:21070968). Has no activity towards a cap structure lacking an RNA moiety (PubMed:21070968). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR221051