

## Product datasheet for **MG221051**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dcp2 (NM_027490) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dcp2
Synonyms:	2410015D23Rik; 5730537H01Rik; AL118268
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221051 representing NM_027490 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCCCAAACGCCTGGAGATCCCGGCAGCGTCCTGGATGATCTCTGCAGCCGATTTATTTGCATA  
TTCCCAGTGAAGAAAGAGACAATGCGATCCGAGTGTGCTTCCAGATTGAAGCTTGGCCATTGGTTTTACTT  
GGATTTCTACATGCAGAACACACCAGGATTACCTCAGTGGGATAAGAGACTTTGCCAAAGCTGTTTTCT  
AGTCACGTCCATTTCTGCTGCCACAAGGTGAAGATGTGGAAAAGATTTGGATGAATGGAAGGAATATA  
AAATGGGAGTCCCGACTTACGGTCAATTATTCTCGATGAGACTGGAGAATGTACTGCTGGTTCAGGG  
GTACCTGGCAAAGTCAGGCTGGGGATCCCAAAAGGAAAAGTAAATAAAGAAGAGGCGCCTCATGACTGT  
GCGGCGAGAGAGGCTTTCGAGGAACTGGTTTTGATATAAAAGACTATATTTGTAAGGATGATTACATTG  
AACTGCGAATCAATGACCAGCTTGTCTCGCTTGTACATCATTCCAGGAGTCCCAAAAGACACAAAATTTAA  
CCCCAAAACCAGAAGAGAAATTAGGAATATTGAGTGGTTCTCCATTGAGAAATTGCCCTGTATAGAAAAT  
GACATGACTCCCAAGTCCAAGCTTGGCTTGGCACCTAATAAGTTTTTTATGGCCATTCCCTTTATCAGAC  
CACTAAGGGACTGGCTGTCTCGAAGATTTGGAGATTCCTCGACAGTGACAATGGGTTTTCTCAGCTGG  
TAGCACACCAGCTAGACCACCGTGGAGAAATTGAGTCGAACAAAATTCGCCACAGCCAGCAGCTGTTT  
CCTGAAGTTCCCCGAGTGACCAGTGGTTAAGCACCGGACCCACTGCAGCAGAAGTACACAGTAACC  
ACGGGGAGGTGTGCGACCTTCTCAAAGCAAAGAATCAAAATATGAGAGGGAATGGCAGAAAACAGTATCA  
AGACTCACCTAATCAAAAGAAGAGAGCGAACGGAGTCCATGGTCAGCCGCAAAAGCAGCAGAATCCCTTG  
GTGAAATGTGAAAAGAAGCTGCATCCACGGAACTTCAGGACAACTTCGAGACAGATGCCACATGTGACC  
TGCCTTGTCTGGTGAAGAGCCGTCCGTAGAACATGCTGAGGGACATTCTGTGCCATGCAACGGACATTG  
CAAGTTCCCATTTTCATCCAGAGCCTTCTGAGTTTCAAGTTTGACCAAAATGCTATAATGAAAATCTTG  
GACCTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG221051 representing NM\_027490  
 Red=Cloning site Green=Tags(s)

MEPKRLEIPGSVLDDLCSRFLHIPSEERDNAIRVCFQIELAHWFYLD FYMQNTPLPQCGIRDFAKAVF  
 SHCPFLLPQGEDVEKILDEWKEYKMGVPTYGAIILDETLNVLVQGYLAKSGWGFPGKGVNKEEAPHDC  
 AAREVFEETGFDIKDYICKDDYIELRINDQLARLYIIPGVPKDTKFNPKTRREIRNIEWFSIEKLPCHRN  
 DMTPKSKLGLAPNKFFMAIPFIRPLRDWLSRRFGDSSSDNGFSSAGSTPARPTVEKLSRTKFRHSQQLF  
 PEGSPSDQWVKHRQPLQKQSHSNHGEVSDLLKAKNQNMGRNGRKQYQDSPNQKKRANGVHGQPAKQQNPL  
 VKCEKHLHPRKLQDNFETDATCDLPCSGEEPSVEHAEGHSVACNGHCKFPFSSRAFLSFKFDQNAIMKIL  
 DL

TRTRPLE - GFP Tag - V

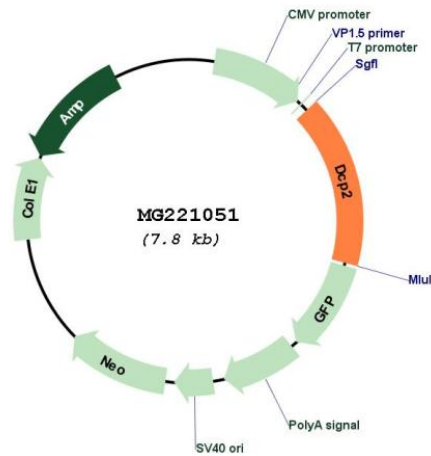
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM\_027490

<b>ORF Size:</b>	1266 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_027490.1</a> , <a href="#">NP_081766.1</a>
<b>RefSeq Size:</b>	8643 bp
<b>RefSeq ORF:</b>	1269 bp
<b>Locus ID:</b>	70640
<b>UniProt ID:</b>	<a href="#">Q9CYC6</a>
<b>Cytogenetics:</b>	18 B3
<b>Gene Summary:</b>	<p>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]</p>