

## Product datasheet for **RG209080**

### CRMP2 (DPYSL2) (NM\_001386) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CRMP2 (DPYSL2) (NM_001386) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DPYSL2
Synonyms:	CRMP-2; CRMP2; DHPRP2; DRP-2; DRP2; N2A3; ULIP-2; ULIP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209080 representing NM\_001386  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCCTTATCAGGGGAAGAAAAATATTCCACGCATCACGAGCGATCGTCTTCTGATCAAAGGAGGTAAAA  
 TTGTTAATGATGACCAGTCGTTCTATGCAGACATATACATGGAAGATGGGTTGATCAAGCAAATAGGAGA  
 AAATCTGATTGTGCCAGGAGGAGTGAAGACCATCGAGGCCCACTCCCGGATGGTATCCCCGGAGGAATT  
 GACGTCCACACTCGTTTCCAGATGCCTGATCAGGGAATGACGTCTGCTGATGATTTCTTCCAAGGAACCA  
 AGGCGGCCCTGGCTGGGGGAACCACTATGATCATTGACCAGTGTCTGAGCCTGGGACAAGCCTGCT  
 CGCTGCCTTTGACCAGTGGAGGGAATGGGCCGACAGCAAGTCTGCTGTGACTACTCTCTGCATGTGGAC  
 ATCAGTGAGTGGCATAAGGGCATCCAGGAGGAGATGGAAGCGCTTGTGAAGGATCACGGGGTAAATTCCT  
 TCCTCGTGTACATGGCTTCAAAGATCGCTTCCAGCTAACGGATTGCCAGATTTATGAAGTACTGAGTGT  
 GATCCGGGATATTGGCGCATAGCCAAGTCCACGCAGAAAATGGCGACATCATTGCAGAGGAGCAGCAG  
 AGGATCCTGGATCTGGGCATCACGGGCCCGAGGGACATGTGCTGAGCCGACCTGAGGAGGTCGAGGCCG  
 AAGCCGTGAATCGTGCCATCACCATCGCCAACCAAGACCAACTGCCCGCTGTATATACCAAGGTGATGAG  
 CAAAAGCTCTGCTGAGGTCATCGCCAGGCACGGAAGAAGGGAAGTGTGGTGTATGGCGAGCCCATCACT  
 GCCAGCTTGGGAACGGACGGCTCCCATTACTGGAGCAAGAAGTGGGCCAAGGCTGCTGCCTTTGTACCT  
 CCCACCCCTTGAGCCCTGATCCAACCACTCCAGACTTTCTCAACTCCTTGCTGTCTGTGGAGACCTCCA  
 GGTCACGGGCAGTGGCCATTGCACGTTTAACTGCCAGAAGGCTGTAGGAAAGGACAACCTTACCCTG  
 ATTCGGGAGGCACCAATGGCAGTGGAGGCGGATGTCCGTCTCTGGGACAAGGCTGTGGTCACTGGGA  
 AGATGGATGAGAACCAGTTTGTGGCTGTGACAGCACCACCAATGCAGCCAAGTCTTCAACCTTTACCCCG  
 GAAAGGCCGATTGCTGTGGGATCCGATGCCGACCTGGTCTCTGGGACCCGACAGCGTTAAAACCATC  
 TCTGCCAAGACACACAACAGCTCTCTCGAGTACAACATCTTTGAAGGCATGGAGTGCCGCGGCTCCCCAC  
 TGGTGGTGTATCAGCCAGGGGAAGATTGCTCTGGAGGACGGCACCTGCATGTACCCGAAGGCTCTGGACG  
 CTACATCCCCGGAAGCCCTTCCCTGATTTTGTACAAGCGTATCAAGGCAAGGAGCAGGCTGGCTGAG  
 CTGAGAGGGGTTCTCGTGGCCTGTATGACGGACCTGTGTGTGAAGTGTCTGTGACGCCCAAGACAGTCA  
 CTCCAGCCTCCTCGCCAAGACGTCTCTGCCAAGCAGCAGGCCCCACCTGTCCGGAACCTGCACCAGTC  
 TGGATTAGTTTGTCTGGTGTCTCAGATTGATGACAACATTCGCCCGCCACCACCAGCGTATCGTGGCG  
 CCCCCGGTGGCGTGCCAACATCACCAGCCTGGGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG209080 representing NM\_001386  
 Red=Cloning site Green=Tags(s)

MSYQGKKNIPRITSDRLLIKGGKIVNDDQSFYADIYMEDGLIKQIGENLIVPGGVKTIEAHSRMVIPGGI  
 DVHTRFQMPDQGMTSADDFQGTKAALAGGTTMIIDHVVPEPGTSLLAAFDQWREWADSKSCCDYSLHVD  
 ISEWHKGIQEEMEALVKDHGVNSFLVYMAFKDRFQLTDCQIYEVLVSVIRDIGAIQVHAENGDIIEEQQ  
 RILDLGITGPEGHVLSRPEEVEAEAVNRAITIANQTNCLYITKVMSSSAEVIQARKKGTVVYGEPIIT  
 ASLGTDGSHYWSKNWAKAAAFVTSPLSPDPTTDFLNSLLSCGDLQVTGSAHCTFNTAQKAVGKDNFTL  
 IPEGTNGTEERMSVIWDKAVVTGKMDENQFVAVTSTNAKVFNL YPRKGRIVAGSDADLVIWDPDSVKTI  
 SAKTHNSSLEYNIFEGMECRGSPLVVISQGKIVLEDGTLHVTEGSGRYIPRKPFPDFVYKRIKARSRLAE  
 LRGVPRGLYDGPVCEVSVTPKTVTPASSAKTSPAKQQAPPVVRNLHQSGFSLSGAQIDDNIPRRTTQRIVA  
 PPGGRANITSLG

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

SgfI-MluI



**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\\_001386.6](#)

**RefSeq Size:** 4638 bp

**RefSeq ORF:** 1719 bp

**Locus ID:** 1808

**UniProt ID:** [Q16555](#)

**Cytogenetics:** 8p21.2

**Domains:** Amidohydro\_1

**Protein Families:** Druggable Genome

**Protein Pathways:** Axon guidance

**Gene Summary:**

This gene encodes a member of the collapsin response mediator protein family. Collapsin response mediator proteins form homo- and hetero-tetramers and facilitate neuron guidance, growth and polarity. The encoded protein promotes microtubule assembly and is required for Sema3A-mediated growth cone collapse, and also plays a role in synaptic signaling through interactions with calcium channels. This gene has been implicated in multiple neurological disorders, and hyperphosphorylation of the encoded protein may play a key role in the development of Alzheimer's disease. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Sep 2011]