

## Product datasheet for **RG216498**

### Myelin oligodendrocyte glycoprotein (MOG) (NM\_206811) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myelin oligodendrocyte glycoprotein (MOG) (NM_206811) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MOG
Synonyms:	BTN6; BTNL11; MOGIG2; NRCLP7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216498 representing NM_206811 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAAGCTTATCAAGACCCTCTGCCAGCTGCCTCTGCTCCTTCTCCTCCTCCTCCTCCAAG  
TGTCTTCAGCTATGCAGGGCAGTTCAGAGTGATAGGACCAAGACACCCTATCCGGGCTCTGGTCGGGA  
TGAAGTGAATTGCCATGTCGCATATCTCTGGGAAGAACGCTACAGGCATGGAGGTGGGTGGTACCGC  
CCCCCTTCTCTAGGGTGGTTCATCTCTACAGAAATGGCAAGGACCAAGATGGAGACCAGGCACCTGAAT  
ATCGGGGCCGGACAGAGCTGCTGAAAGATGCTATTGGTGAGGAAAGGTGACTCTCAGGATCCGGAATGT  
AAGTTTCTCAGATGAAGGAGTTTACCTGCTTCTCCGAGATCATTCTTACCAAGAGGAGGCAGCAATG  
GAATTGAAAGTAGAAGATCCTTTCTACTGGGTGAGCCCTGGAGTGCTGGTTCTCCTCGCGGTGCTGCCTG  
TGCTCCTCCTGCAGATCACTGTTGGCCTCATCTTCTCTGCTGCACTACAGACTGAGAGGAAAACCTTCG  
AGCAGAGATAGAGAATCTCCACCGGACTTTTGGTGTCTTAGGACCCAGGTTAAGGAACCA  
AAAAGACAGGGCAATTCCTTGAAGAGCTACTTCCACCTGGAAGCCCTCTCTGGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG216498 representing NM\_206811  
Red=Cloning site Green=Tags(s)

MASLSRPSLPSCLCSFLLLLLLQVSSSYAGQFRVIGPRHPRALVGDEVELPCRISPGKNATGMEVGWYR  
 PPF SRVVHLYRNGKDQDGDQAPEYRGRTELLKDAIGEGKVTLRIRNVRF SDEGGF TCF FRDHSYQEEAAM  
 ELKVEDPFYWVSPGVLVLLAVLPVLLLQITVGLIFLCLQYRLRGLRAE IENLHRTFESFGVLGPQVKEP  
 KKTGQFLEELLFHLEALSG

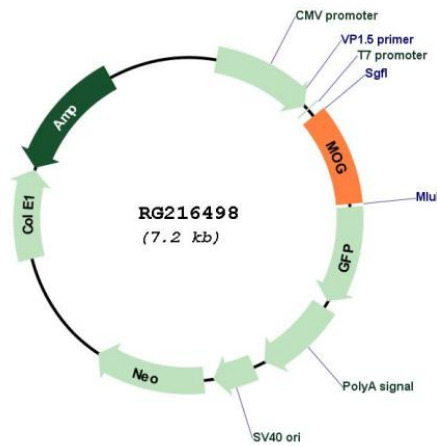
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_206811

**ORF Size:** 687 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\\_206811.4](#)

**RefSeq Size:** 1851 bp

**RefSeq ORF:** 690 bp

**Locus ID:** 4340

**UniProt ID:** [Q16653](#)

**Cytogenetics:** 6p22.1

**Protein Families:** Transmembrane

**Gene Summary:** The product of this gene is a membrane protein expressed on the oligodendrocyte cell surface and the outermost surface of myelin sheaths. Due to this localization, it is a primary target antigen involved in immune-mediated demyelination. This protein may be involved in completion and maintenance of the myelin sheath and in cell-cell communication. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]