

Product datasheet for **SC308258**

Myelin oligodendrocyte glycoprotein (MOG) (NM_206809) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Myelin oligodendrocyte glycoprotein (MOG) (NM_206809) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Myelin oligodendrocyte glycoprotein |
| Synonyms: | BTN6; BTNL11; MOGIG2; NRCLP7 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_206809, the custom clone sequence may differ by one or more nucleotides |

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ATGGCAAGCTTATCAAGACCCTCTGCCCAGCTGCCTCTGCTCCTTCCTCCTCCTCCTCCTCCAAG
TGTCTTCCAGCTATGCAGGGCAGTTCAGAGTGATAGGACCAAGACACCCTATCCGGGCTCTGGTCGGGA
TGAAGTGAATTGCCATGTCGCATATCTCCTGGGAAGAACGCTACAGGCATGGAGGTGGGGTGGTACCGC
CCCCCTTCTCTAGGGTGGTTCATCTCTACAGAAATGGCAAGGACCAAGATGGAGACCAGGCACCTGAAT
ATCGGGGCCGGACAGAGCTGCTGAAAGATGCTATTGGTGAGGGAAAGGTGACTCTCAGGATCCGGAATGT
AAGTTCTCAGATGAAGGAGTTTACCTGCTTCTCCGAGATCATTCTACCAAGAGGAGGCAGCAATG
GAATTGAAAGTAGAAGATCCTTTCTACTGGGTGAGCCCTGGAGTGCTGGTTCTCCTCGCGGTGCTGCCTG
TGCTCCTCTGCAGATCACTGTTGGCCTCATCTTCTCCTGCTGCAGTACAGACTGAGAGGAAAACCTCG
AGCAGAGATAGAGAATCTCCACCGGACTTTTGATCCCCACTTTCTGAGGGTGCCCTGCTGGAAGATAACC
CTGTTTGAATTGTGCCGTTCTTGGACCCTTGGTTGCCTTGATCATCTGCTACAACCTGGCTACATCGAA
GACTAGCAGGGCAATTCTTGAAGAGCTACGAAATCCCTTCTGA
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|--------------------|----------------|
| Restriction Sites: | Please inquire |
| ACCN: | NM_206809 |



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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 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_206809.2](#), [NP_996532.2](#)

RefSeq Size: 2119 bp

RefSeq ORF: 744 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]

Transcript Variant: This variant (alpha1) contains an additional segment in the coding region compared to variant beta1. Alpha type variants use an alternative splice site at the 3' end, compared to variant beta1. The resulting isoform (alpha1), also known as isoform 2, contains a shorter and distinct C-terminus compared to isoform beta1.