

Product datasheet for **RG223054**

Myelin oligodendrocyte glycoprotein (MOG) (NM_001008229) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Myelin oligodendrocyte glycoprotein (MOG) (NM_001008229) 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: >RG223054 representing NM_001008229
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAAGCTTATCAAGACCCTCTGCCCAGCTGCCTCTGCTCCTTCTCCTCCTCCTCCTCCAAG
 TGTCTTCCAGCTATGCAGGGCAGTTCAGAGTGATAGGACCAAGACACCCTATCCGGGCTCTGGTCCGGGA
 TGAAGTGAATTGCCATGTCGCATATCTCCTGGGAAGAAGCTACAGGCATGGAGTGGGTGGTACCGC
 CCCCCCTTCTTAGGGTGGTTCATCTCTACAGAAATGGCAAGGACCAAGATGGAGACCAGGCACCTGAAT
 ATCGGGGCCGGACAGAGCTGCTGAAAGATGCTATTGGTGAGGAAAGGTGACTCTCAGGATCCGGAATGT
 AAGTTTCTCAGATGAAGGAGTTTACCTGCTTCTCCGAGATCATTCTTACCAAGAGGAGGCAGCAATG
 GAATTGAAAGTAGAAGATCCTTTCTACTGGGTGAGCCCTGGAGTCTGCTGCTCCTCGCGGTGCTGCCTG
 TGCTCCTCCTGCAGATCACTGTTGGCCTCATCTTCTCCTGCTGCTGAGTACAGACTGAGAGGAAAACCTTCG
 AGCAGAGATAGAGAATCTCCACCGGACTTTTGTCTTCCACCTGGAAGCCCTCTCTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223054 representing NM_001008229
 Red=Cloning site Green=Tags(s)

MASLSRPSLPSCLCSFLLLLLLQVSSSYAGQFRVIGPRHPIRALVGDEVELPCRISPGKNATGMEVGWYR
 PPFSRVHLRYNGKDQDQDAPEYRGRTELLKDAIGEGKVTLRIRNVRFSDGGFTCFRFDHSYQEEAAM
 ELKVEDPFYWVSPGVLVLLAVLPVLLLQITVGLIFLCLQYRLRGKLRAEIENLHRTFVFHLEALSG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

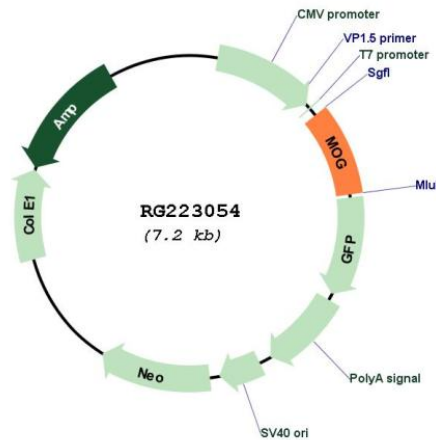


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001008229

ORF Size: 618 bp

OTI Disclaimer: 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_001008229.3](#)

RefSeq Size: 1782 bp

RefSeq ORF: 621 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]