

## Product datasheet for **RC223054**

### 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:** Myc-DDK  
**Symbol:** Myelin oligodendrocyte glycoprotein  
**Synonyms:** BTN6; BTNL11; MOGIG2; NRCLP7  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC223054 representing NM\_001008229  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAAGCTTATCAAGACCCCTCTGCCCAGCTGCCTCTGCTCCTTCTCCTCCTCCTCCTCCAAG  
 TGTCTTCCAGCTATGCAGGGCAGTTCAGAGTGATAGGACCAAGACACCCTATCCGGGCTCTGGTCGGGA  
 TGAAGTGAATTGCCATGTCGCATATCTCCTGGGAAGAAGCTACAGGCATGGAGGTGGGTGGTACCGC  
 CCCCCCTCTAGGGTGGTTCATCTCTACAGAAATGGCAAGGACCAAGATGGAGACCAGGCACCTGAAT  
 ATCGGGCCGGACAGAGCTGCTGAAAGATGCTATTGGTGAGGAAAGGTGACTCTCAGGATCCGGAATGT  
 AAGGTTCTCAGATGAAGGAGTTTACCTGCTTCTCCGAGATCATTCTTACCAAGAGGAGGCAGCAATG  
 GAATTGAAAGTAGAAGATCCTTTCTACTGGGTGAGCCCTGGAGTCTGCTGCTCCTCGCGGTGCTGCCTG  
 TGCTCCTCCTGCAGATCACTGTTGGCCTCATCTTCTCCTGCTGCTGAGTACAGACTGAGAGGAAAACCTTCG  
 AGCAGAGATAGAGAATCTCCACCGGACTTTTGTCTTCCACCTGGAAGCCCTCTCTGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC223054 representing NM\_001008229  
 Red=Cloning site Green=Tags(s)

MASLSRPSLPSCLCSFLLLLLLQVSSSYAGQFRVIGPRHPRALVGDEVELPCRISPGKNATGMEVGWYR  
 PPFSRVVHL YRNGKDQDQDAPEYRGRTELLKDAIGEGKVTLRIRNVRF SDEGGFTCF FRDHSYQEEAAM  
 ELKVEDPFYWVSPGVLVLLAVLPVLLLQITVGLIFLCLQYRLRGKLR AEIENLHRTFVFHLEALSG

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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](#)

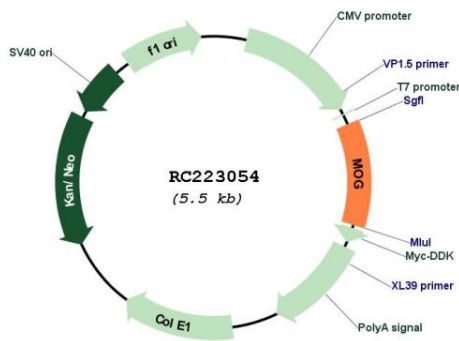
**Cytogenetics:** 6p22.1

**Protein Families:** Transmembrane

**MW:** 23.3 kDa

**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]

**Product images:**



Circular map for RC223054