*h*MOG VersaClone cDNA

Catalog Number: RDC1547

Specifications:

Gene:	*h*MOG
Accession:	NP_002424
Insert size:	772bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

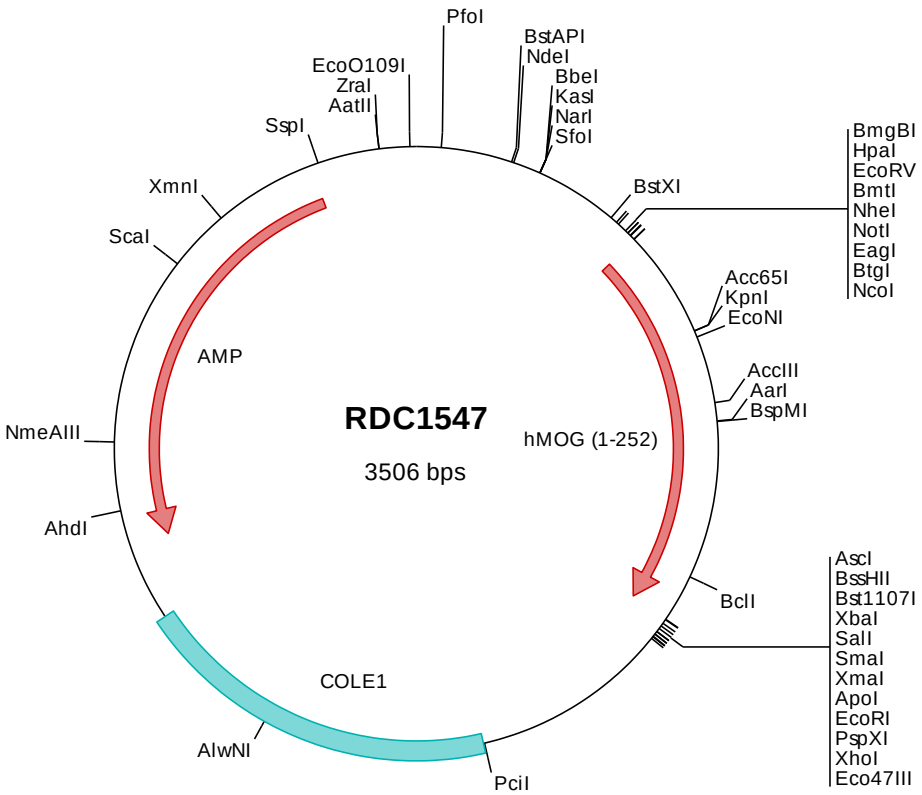
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*MOG cDNA Plasmid

MOG myelin oligodendrocyte glycoprotein [*Homo sapiens* (human)]

Also known as: BTN6; BTNL11; MOGIG2; NRCLP7

Summary:
MOG is an integral membrane protein belonging to the immunoglobulin superfamily. It is 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. MOG may be involved in completion and maintenance of the myelin sheath and in cell-cell communication. Alternatively spliced transcripts encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS™
a bio-techne brand

> RDC1547 Plasmid DNA Sequence

```
   1  tcgcgcgttt cggtgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atggcaagct tatcaagacc ctctctgccc agctgcctct gctccttcct
 501  cctgctcctc ctgctccaag tgtcttccag ctatgcaggg cagttcagag tgataggacc aagacaccct atccgggctc tggtcgggga tgaagtggaa
 601  ttgccatgtc gcatatctcc tgggaagaac gctacaggca tggaggtggg gtggtaccgc ccccccttct ctagggtggt tcatctctac agaaatggca
 701  aggaccaaga tggagaccag gcacctgaat atcggggccg gacagagctg ctgaaagatg ctattggtga gggaaaggtg actctcagga tccggaatgt
 801  aaggttctca gatgaaggag gtttcacctg cttcttccga gatcattctt accaagagga ggcagcaatg gaattgaaag tagaagatcc tttctactgg
 901  gtgagccctg gagtgctggt tctcctcgcg gtgctgcctg tgctcctcct gcagatcact gttggcctca tcttcctctg cctgcagtac agactgagag
1001  gaaaacttcg agcagagata gagaatctcc accggacttt tgatccccac tttctgaggg tgccctgctg gaagataacc ctgtttgtaa ttgtgccggt
1101  tcttggaccc ttggttgcct tgatcatctg ctacaactgg ctacatcgaa gactagcagg gcaattcctt gaagagctac tcttccacct ggaagccctc
1201  tctggctaaa ggcgcgccag tatactctag agtcgacacc cggggaattc ctcgagcgct cgtctctagc ttggcgtaat catggtcata gctgtttcct
1301  gtgtgaaatt gttatccgct cacaattcca cacaacatac gagccggaag cataaagtgt aaagcctggg gtgcctaatg agtgagctaa ctcacattaa
1401  ttgcgttgcg ctcactgccc gctttccagt cgggaaacct gtcgtgccag ctgcattaat gaatcggcca acgcgcgggg agaggcggtt tgcgtattgg
1501  gcgctcttcc gcttcctcgc tcactgactc gctgcgctcg gtcgttcggc tgcggcgagc ggtatcagct cactcaaagg cggtaatacg gttatccaca
1601  gaatcagggg ataacgcagg aaagaacatg tgagcaaaag gccagcaaaa ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc cataggctcc
1701  gcccccctga cgagcatcac aaaaatcgac gctcaagtca gaggtggcga aacccgacag gactataaag ataccaggcg tttcccccctg gaagctccct
1801  cgtgcgctct cctgttccga ccctgccgct taccggatac ctgtccgcct ttctcccttc gggaagcgtg gcgctttctc aatgctcacg ctgtaggtat
1901  ctcagttcgg tgtaggtcgt tcgctccaag ctgggctgtg tgcacgaacc ccccgttcag cccgaccgct gcgccttatc cggtaactat cgtcttgagt
2001  ccaacccggt aagacacgac ttatcgccac tggcagcagc cactggtaac aggattagca gagcgaggta tgtaggcggt gctacagagt tcttgaagtg
2101  gtggcctaac tacggctaca ctagaaggac agtatttggt atctgcgctc tgctgaagcc agttaccttc ggaaaaagag ttggtagctc ttgatccggc
2201  aaacaaacca ccgctggtag cggtggtttt tttgtttgca agcagcagat tacgcgcaga aaaaaaggat ctcaagaaga tcctttgatc ttttctacgg
2301  ggtctgacgc tcagtggaac gaaaactcac gttaagggat tttggtcatg agattatcaa aaaggatctt cacctagatc cttttaaatt aaaaatgaag
2401  ttttaaatca atctaaagta tatatgagta aacttggtct gacagttacc aatgcttaat cagtgaggca cctatctcag cgatctgtct atttcgttca
2501  tccatagttg cctgactccc cgtcgtgtag ataactacga tacgggaggg cttaccatct ggccccagtg ctgcaatgat accgcgagac ccacgctcac
2601  cggctccaga tttatcagca ataaaccagc cagccggaag ggccgagcgc agaagtggtc ctgcaacttt atccgcctcc atccagtcta ttaattgttg
2701  ccgggaagct agagtaagta gttcgccagt taatagtttg cgcaacgttg ttgccattgc tacaggcatc gtggtgtcac gctcgtcgtt tggtatggct
2801  tcattcagct ccggttccca acgatcaagg cgagttacat gatccccccat gttgtgcaaa aaagcggtta gctccttcgg tcctccgatc gttgtcagaa
2901  gtaagttggc cgcagtgtta tcactcatgg ttatggcagc actgcataat tctcttactg tcatgccatc cgtaagatgc ttttctgtga ctggtgagta
3001  ctcaaccaag tcattctgag aatagtgtat gcggcgaccg agttgctctt gcccggcgtc aatacgggat aataccgcgc cacatagcag aactttaaaa
3101  gtgctcatca ttggaaaacg ttcttcgggg cgaaaactct caaggatctt accgctgttg agatccagtt cgatgtaacc cactcgtgca cccaactgat
3201  cttcagcatc ttttactttc accagcgttt ctgggtgagc aaaaacagga aggcaaaatg ccgcaaaaaa gggaataagg gcgacacgga aatgttgaat
3301  actcatactc ttcctttttc aatattattg aagcatttat cagggttatt gtctcatgag cggatacata tttgaatgta tttagaaaaa taaacaaata
3401  ggggttccgc gcacatttcc ccgaaaagtg ccacctgacg tctaagaaac cattattatc atgacattaa cctataaaaa taggcgtatc acgaggccct
3501  ttcgtc
```

> RDC1547 Translated Insert Sequence

```
  1  maslsrpslp sclcsflll llqvsssyag qfrvigprhp iralvgdeve lpcrispgkn atgmevgwyr ppfsrvvhly rngkdqdgdq apeyrgrtel
101  lkdaigegkv tlrirnvrfs deggftcffr dhsyqeeaam elkvedpfyw vspgvlvlla vlpvlllqit vgliflclqy rlrgklraei enlhrtfdph
201  flrvpcwkit lfvivpvlgp lvaliicynw lhrrlagqfl eellfhleal sg
```