Active Recombinant Human Oligodendrocyte Myelin Glycoprotein, His-tagged

Cat. No. OMG-1893H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human OMgp encoding OMgp (Met 1- Asn 420) with a carboxyl-terminal his tag was expressed in*NSO*.
Species	Human
Source	Mammalian Cells
ProteinLength	1-420 a.a.
Description	Myelin Oligodendrocyte Glycoprotein (MOG) is a glycoprotein believed to be important in the process of myelinization of nerves in the central nervous system (CNS). In humans this protein is encoded by the MOG gene. It is speculated to serve as a necessary "adhesion molecule" to provide structural integrity to the myelin sheath and is known to develop late on the oligodendrocyte.
Purity	> 90%, as determined by SDS-PAGE and visualized by silver stain.
Format	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that sterile phosphate-buffered saline be added to the vial to prepare a working stock solution of no less than 100 μg/mL. The carrier-free protein should be used immediately upon reconstitution to avoid losses in activity due to non-specific binding to the inside surface of the vial. For long term storage as a dilute solution, a carrier protein (e.g. 0.1% HSA or BSA) should be added to the vial.

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Endotoxin Levels	< 1.0 EU per 1 μg of the enzyme as determined by the LAL method.
Molecular Mass	Based on N-terminal amino acid sequencing, the recombinant human OMgp protein starts at Ile 25 and has a calculated molecular mass of 46 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 100 - 120 kDa protein in SDS-PAGE under reducing conditions.
Activity	Measured by its ability to inhibit neurite outgrowth of cultured embryonic chick dorsal root ganglia neurons. Immobilized OMgp on nitrocellulose-backed microplate (at a 3 μL droplet containing 200 ng) is sufficient to significantly inhibit neurite outgrowth. All experiments were done under carrier-free conditions.
Storage	Lyophilized samples are stable for up to six months at -20° C to -70° C. Upon reconstitution, this cytokine, in the presence of a carrier protein, can be stored under sterile conditions at 2 - 8° C for one month or at -20° C to -70° C in a manual defrost freezer for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	OMG oligodendrocyte myelin glycoprotein [Homo sapiens]
Synonyms	oligodendrocyte myelin glycoprotein; OMGP; OMG; oligodendrocyte-myelin glycoprotein
Gene ID	4974
mRNA Refseq	NM_002544.4
Protein Refseq	NP_002535.3

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MIM	164345
UniProt ID	P23515
Chromosome Location	17q11.2
Pathway	Signalling by NGF
Function	protein binding

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