



## Product Datasheet

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| <b>Product Name</b> | Myelin Oligodendrocyte Glycoprotein Human Recombinant        |
| <b>Cata No</b>      | CB501082   |
| <b>Source</b>       | <i>Escherichia Coli.</i>                                     |
| <b>Synonyms</b>     | Myelin Oligodendrocyte Glycoprotein, MOG, MOGIG-2, MGC26137. |

### Description

Myelin Oligodendrocyte Glycoprotein is a membrane protein expressed on the oligodendrocyte cell surface and the outermost surface of myelin sheaths. Due to this localization, it is a prime target antigen that plays a role in immune-mediated demyelination. Myelin Oligodendrocyte Glycoprotein is involved in completion and maintenance of the myelin sheath and in cell-cell communication. MOG protein was found to differentially expressed in the dorsolateral prefrontal cortex and in the temporal lobe from patients with schizophrenia. MOG-specific antibody is crucial to the initiation of MOG-induced murine experimental autoimmune encephalomyelitis. Myelin Oligodendrocyte Glycoprotein produced in E.Coli is a single, non-glycosylated polypeptide chain containing 132 amino acids and having a molecular mass of 15.2 kDa. The Myelin Oligodendrocyte Glycoprotein is fused with 6xHis tag at C-terminus.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Purity

Greater than 95.0% as determined by:  
(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

### Formulation

The Myelin Oligodendrocyte Glycoprotein 0.5mg/ml solution was lyophilized from 20mM sodium acetate buffer pH-4 and 0.3M sodium chloride.

### Reconstitution

It is recommended to reconstitute the lyophilized MOG in sterile 10mM Acetic acid not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized MOG although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MOG should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

5-20µg per ml for In-Vitro Experiments and 50-100µg per animal for In-Vivo study.

The protein can be used for T-cell proliferation, cytokine induction, antigen presentation, western blotting, ELISA and EAE induction in mice.