



Product Datasheet

Product Name	Myelin Oligodendrocyte Glycoprotein
Cata No	CB500992
Source	
Synonyms	Myelin Oligodendrocyte Glycoprotein, MOG.

Description

MOG is a transmembrane protein expressed on the surface of oligodendrocyte cell and on the outermost surface of myelin sheaths. MOG comprises about 0.1% of total CNS myelin protein. The MOG gene is a member of the immunoglobulin gene superfamily and is found within the MHC. The MOG gene is found on chromosome 6p21.3-p22. Myelin Oligodendrocyte Glycoprotein is a glycoprotein thought to be significant in the process of myelination of nerves in the central nervous system (CNS). MOG peptide (35-55) is highly encephalitogenic and can induce strong T and B cell responses. A single injection of this peptide produces a relapsing- remitting neurologic disease with extensive plaque-like demyelination. Because of the clinical, histopathologic, and immunologic similarities with multiple sclerosis (MS), the MOG induced demyelinating encephalomyelitis may serve as a model for investigating MS. Myelin Oligodendrocyte Glycoprotein is a single, non-glycosylated polypeptide chain containing 21 amino acids and having a molecular mass of 2582

Dalton, the molecular formula: $C_{118}H_{177}N_{35}O_{29}S$.

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 protein was lyophilized with no additives.

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.