

## MOG - Purified

**Catalog No.:** AR10743PU-S

**Quantity:** 5 mg

**Background:** 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.

**Source:** Synthetic

**Format:** **State:** Sterile Filtered White lyophilized (freeze-dried) powder with no additives

**Purity:** > 98.0% as determined by both RP-HPLC and SDS-PAGE analysis

**Reconstitution:** Restore in sterile 18MΩ-cm<sup>-1</sup> H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions

**Description:** Myelin Oligodendrocyte Glycoprotein is a single, non-glycosylated polypeptide chain containing 21 amino acids.

**Amino Acid Composition:** H-Met-Glu-Val-Gly-Trp-Tyr-Arg-Ser-Pro-Phe-Ser-Arg-Val-Val-His-Leu-Tyr-Arg-Asn-Gly-Lys-OH.

**Molecular weight:** 2582 Da

**Storage:** Prior to reconstitution store at 2-8°C.

Following reconstitution store undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer.

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

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.