



# Recombinant Protein Technical Manual

**Recombinant Human MOG Protein (aa 3049, His Tag)**  
RPES4421

## Product Data:

**Product SKU:** RPES4421

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_996532.2

## Protein Information:

**Molecular Mass:** 15 kDa

**AP Molecular Mass:** 19 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Myelin-Oligodendrocyte Glycoprotein; MOG;BTN6;BTNL11;MOGIG2;NRCLP7

## Immunogen Information:

**Sequence:** Gly 30-Tyr 149

## Background:

Myelin oligodendrocyte glycoprotein (MOG) is a transmembrane protein belonging to immunoglobulin superfamily, and contains an Ig-like domain followed by two potential membrane-spanning regions. MOG is expressed only in the CNS with very low content (approximately 0.1% total proteins) in oligodendrocyte membrane. Three possible functions for MOG were suggested: (a) a cellular adhesive molecule, (b) a regulator of oligodendrocyte microtubule stability, and (c) a mediator of interactions between myelin and the immune system, in particular, the complement cascade. A direct interaction might exist between the membrane-associated regions of MOG and the myelin-specific glycolipid galactocerebroside (Gal-C), and such an interaction may have important consequences regarding the membrane topology and function of both molecules. It is considered that MOG is an autoantigen capable to produce a demyelinating multiple sclerosis-like disease in experimental animals.