

Recombinant Human Myelin oligodendrocyte glycoprotein/MOFG Protein

Catalog No.: RP01361 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 4340 Q16653

Tags C-His

Synonyms

BTN6; BTNL11; MOGIG2; NRCLP7;MOG;BTNL11;MOGIG2;NRCLP7

Product Information

Source Purification

HEK293 cells ≥ 95 % as determined by SDS-

PAGE.

Calculated MW Observed MW

15.11 kDa 15-25 kDa

Endotoxin

 $< 0.1 \; \text{EU/}\mu\text{g}$ of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

Myelin oligodendrocyte glycoprotein (MOG) is a transmembrane protein belonging to the 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 the oligodendrogliocyte 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 demyelinating multiple sclerosis-like diseases in experimental animals.

Basic Information

Description

Recombinant Human Myelin oligodendrocyte glycoprotein/MOFG Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gly30-Gly154) of human MOG (Accession $\#NP_996532.2$) fused with a $6\times His$ tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human MOG at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well})$ can bind Myelin oligodendrocyte glycoprotein Rabbit mAb with a linear range of 0.98-2.5 ng/mL

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

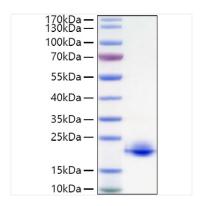
After reconstitution, the protein solution is stable at -20 $^{\circ}$ C for 3 months, at 2-8 $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

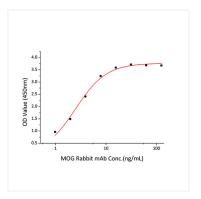
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Validation Data



Recombinant Human Myelin oligodendrocyte glycoprotein/MOFG Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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