

## Recombinant Human MOG Protein (aa 30-149, His Tag)

**Catalog Number:** PKSH031647

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

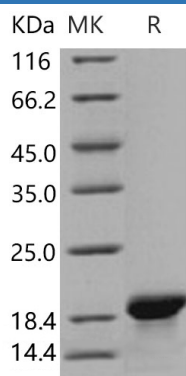
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human MOG protein Gly 30-Tyr 149, with an C-terminal His
<b>Calculated MW</b>	15 kDa
<b>Observed MW</b>	19 kDa
<b>Accession</b>	NP_996532.2
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 97 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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.