**BACKGROUND**

Myelin oligodendrocyte glycoprotein (MOG) is a Myelin component of the central nervous system that influences completion and maintenance of the Myelin sheath, cell adhesion and oligodendrocyte microtubule stability. MOG localizes on the oligodendrocyte cell surface and on the outermost lamellae of mature myelin. MOG epitopes targeted by the autoimmune T cell response influence demyelination and contribute to multiple sclerosis (MS). Alternatively spliced transcript variants encoding different isoforms have been identified.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MOG (human) mapping to 6p22.1; Mog (mouse) mapping to 17 B1.

**SOURCE**

MOG (D-10) is a mouse monoclonal antibody raised against amino acids 176-247 mapping at the C-terminus of MOG of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**APPLICATIONS**

MOG (D-10) is recommended for detection of MOG of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MOG siRNA (h): sc-44495, MOG siRNA (m): sc-44496, MOG shRNA Plasmid (h): sc-44495-SH, MOG shRNA Plasmid (m): sc-44496-SH, MOG shRNA (h) Lentiviral Particles: sc-44495-V and MOG shRNA (m) Lentiviral Particles: sc-44496-V.


**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™ : sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

**DATA**

MOG (D-10): sc-166172. Western blot analysis of MOG expression in mouse brain tissue extract.

MOG (D-10): sc-166172. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing neuropil staining.

**SELECT PRODUCT CITATIONS**