SANTA CRUZ BIOTECHNOLOGY, INC.

MOG (C-16): sc-32581

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Roth, M.P., et al. 1995. The human myelin oligodendrocyte glycoprotein (MOG) gene: complete nucleotide sequence and structural characterization. Genomics 28: 241-250.
2. Pham-Dinh, D., et al. 1995. Structure of the human myelin oligodendrocyte glycoprotein gene and multiple alternative spliced isoforms. Genomics 29: 345-352.

CHROMOSOMAL LOCATION

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

SOURCE

MOG (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of MOG of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-32581 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MOG (C-16) is recommended for detection of precursor and mature MOG of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MOG (C-16) is also recommended for detection of precursor and mature MOG in additional species, including equine, bovine and porcine.

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.

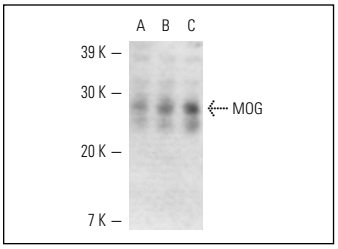
Molecular Weight of MOG: 28 kDa.

Positive Controls: rat cerebellum extract: sc-2398, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MOG (C-16): sc-32581. Western blot analysis of MOG expression in rat cerebellum (**A**), rat brain (**B**) and mouse brain (**C**) tissue extracts.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **MOG (D-2): sc-376138** or **MOG (D-10): sc-166172**, our highly recommended monoclonal alternatives to MOG (C-16).