

# MOBP (FL-182): sc-25666

## BACKGROUND

The gene encoding MOBP (myelin-associated oligodendrocytic basic protein), a member of the central nervous system myelin-constituting proteins, maps to chromosome 3p22.2. MOBP has many splice variants that share a 68 amino acid N-terminal domain. MOBP-71, MOBP-81A, MOBP-99, and MOBP-169 are MOBP splice variants that contain exon 8b, which is similar to myelin basic protein (MBP) mRNA RTS, however MOBP-69, MOBP-81B, and MOBP-170 lack this exon. The splice variants that contain exon 8b are expressed in myelin, while those lacking exon 8b are retained in the oligodendrocyte soma. Exon 8b-containing variants are directed to sites of myelin sheath assembly by exon 8b, where they play a structural role in myelin formation. Splice variants lacking exon 8b likely play a cellular and/or regulatory role. MOBP is implicated in multiple sclerosis (MS), a human demyelinating disease, and in allergic encephalomyelitis in rodents.

## REFERENCES

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3. Renzi, D., Pellegrini, B., Tonelli, F., Surrenti, C. and Calabro, A. 2000. Substance P (neurokinin-1) and neurokinin A (neurokinin-2) receptor gene and protein expression in the healthy and inflamed human intestine. *Am. J. Pathol.* 157: 1511-1522.
4. Zerari, F., Karpitskiy, V., Krause, J., Descarries, L. and Couture, R. 1997. Immunoelectron microscopic localization of NK-3 receptor in the rat spinal cord. *Neuroreport* 8: 2661-2664.
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## CHROMOSOMAL LOCATION

Genetic locus: MOBP (human) mapping to 3p22.1; Mobp (mouse) mapping to 9 F4.

## SOURCE

MOBP (FL-182) is a rabbit polyclonal antibody raised against amino acids 1-182 representing full length MOBP 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.

## STORAGE

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

## APPLICATIONS

MOBP (FL-182) is recommended for detection of MOBP 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).

Suitable for use as control antibody for MOBP siRNA (h): sc-35953, MOBP siRNA (m): sc-35954, MOBP shRNA Plasmid (h): sc-35953-SH, MOBP shRNA Plasmid (m): sc-35954-SH, MOBP shRNA (h) Lentiviral Particles: sc-35953-V and MOBP shRNA (m) Lentiviral Particles: sc-35954-V.

Molecular Weight of MOBP: 25 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **MOBP (4C2): sc-517016**, our highly recommended monoclonal alternative to MOBP (FL-182).