**BACKGROUND**

The olfactory marker protein (OMP) has been shown to interact with the brain expressed X-linked genes BEX1 and BEX2. It is expressed in the cytoplasm of olfactory chemosensory neurons in the nasal neuroepithelium. OMP expression is a sign of mature vertebrate olfactory receptor neurons (ORNs). OMP RNA is synthesized in neuronal cell bodies in the epithelium and is then transported into axons and terminals in the olfactory bulb to be translated. OMP may have a modulatory role in the odor detection/signal transduction cascade. In fetal olfactory epithelial cells, OMP is also a potent enhancer of mitosis, and it promotes an increase in uptake of tritiated thymidine in liver. Deletion of the OMP gene causes a compromised ability to respond to odor stimuli and an elevation in behavioral threshold sensitivity.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: OMP (human) mapping to 11q13.5; Omp (mouse) mapping to 7 E2.

**SOURCE**

OMP (B-6) is a mouse monoclonal antibody raised against amino acids 1-163 representing full length OMP of human origin.

**PRODUCT**

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

OMP (B-6) is available conjugated to agarose (sc-365818 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365818 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365818 PE), fluorescein (sc-365818 FITC), Alexa Fluor® 488 (sc-365818 AF488), Alexa Fluor® 546 (sc-365818 AF546), Alexa Fluor® 594 (sc-365818 AF594) or Alexa Fluor® 647 (sc-365818 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FC; and to either Alexa Fluor® 680 (sc-365818 AF680) or Alexa Fluor® 790 (sc-365818 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FC.

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**APPLICATIONS**

OMP (B-6) is recommended for detection of OMP 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 OMP siRNA (h): sc-61260, OMP siRNA (m): sc-61261, OMP shRNA Plasmid (h): sc-61260-SH, OMP shRNA Plasmid (m): sc-61261-SH, OMP shRNA (h) Lentiviral Particles: sc-61260-V and OMP shRNA (m) Lentiviral Particles: sc-61261-V.

Molecular Weight of OMP: 19 kDa.

Positive Controls: mouse embryo extract: sc-364239, OMP (m): 293T Lysate: sc-127265 or mouse brain extract: sc-2253.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG2a HRP: sc-516102 or m-IgG2a HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz™ Blocking Reagent: sc-516214 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 m-IgG2a BP-IR: sc-516140 or m-IgG2a PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz™ Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**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.