

OMP (m): 293T Lysate: sc-127265

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

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3. Behrens, M., et al. 2003. Identification of members of the BEX gene family as olfactory marker protein (OMP) binding partners. *J. Neurochem.* 86: 1289-1296.
4. Hayward, M.D., et al. 2004. Expression of Bcl-2 extends the survival of olfactory receptor neurons in the absence of an olfactory bulb. *Brain Res. Mol. Brain Res.* 132: 221-234.
5. Moriya-Ito, K., et al. 2005. Maturation of vomeronasal receptor neurons *in vitro* by coculture with accessory olfactory bulb neurons. *Chem. Senses* 30: 111-119.
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7. St John, J.A., et al. 2005. Olfactory marker protein modulates primary olfactory axon overshooting in the olfactory bulb. *J. Comp. Neurol.* 488: 61-69.
8. Nathan, B.P., et al. 2005. Delayed olfactory nerve regeneration in apoE-deficient mice. *Brain Res.* 1041: 87-94.
9. Waguespack, A.M., et al. 2005. Naris occlusion alters olfactory marker protein immunoreactivity in olfactory epithelium. *Brain Res.* 1044: 1-7.

CHROMOSOMAL LOCATION

Genetic locus: Omp (mouse) mapping to 7 E2.

PRODUCT

OMP (m): 293T Lysate represents a lysate of mouse OMP transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

OMP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive OMP antibodies. Recommended use: 10-20 μ l per lane.

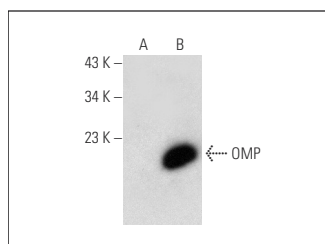
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

OMP (B-6): sc-365818 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse OMP expression in OMP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

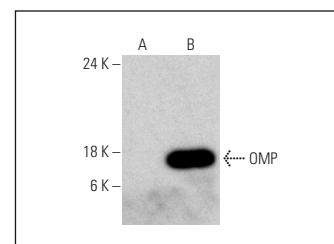
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-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.

DATA



OMP (B-6): sc-365818. Western blot analysis of OMP expression in non-transfected: sc-117752 (A) and mouse OMP transfected: sc-127265 (B) 293T whole cell lysates.



OMP (B-6) HRP: sc-365818 HRP. Direct western blot analysis of OMP expression in non-transfected: sc-117752 (A) and mouse OMP transfected: sc-127265 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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