PRODUCT INFORMATION

Expression system E.coli

Domain 1-163aa

UniProt No. P47874

NCBI Accession No. NP_006180

Alternative Names Olfactory marker protein, Olfactory marker protein, olfactory neuronal-specific protein

PRODUCT SPECIFICATION

Molecular Weight 21.3 kDa (186aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by BCA assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 10% glycerol, 1mM DTT

Purity > 95% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Olfactory marker protein, also known as OMP, is uniquely associated with the mature olfactory receptor neurons in many vertebrate species from fish to man. 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 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. Recombinant human OMP protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by



using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMAEDRPQ QPQLDMPLVL DQGLTRQMRL RVESLKQRGE KRQDGEKLLQ PAESVYRLNF TQQQRLQFER WNVVLDKPGK VTITGTSQNW TPDLTNLMTR QLLDPTAIFW RKEDSDAIDW NEADALEFGE RLSDLAKIRK VMYFLVTFGE GVEPANLKAS VVFNQL

General References

Buiakova O I., et al. (1996) Proc Natl Acad Sci uSA. 93:9858-9863 Behrens M., et al. (2003) J Neurochem. 86: 1289-1296.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)