

Product datasheet for **RC221572**

Olfactory Marker Protein (OMP) (NM_006189) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Olfactory Marker Protein (OMP) (NM_006189) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Olfactory Marker Protein
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221572 representing NM_006189
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGGACAGGCCGAGCAGCCGACGCTGGACATGCCGCTGGTCTGGACCAGGGCCTGACCAGGC
AGATGCGGCTACGCGTGGAGAGCCTGAAGCAGCGCGGGGAGAAGCGCCAGGATGGGGAGAAGCTGCTGCA
GCCAGCGGAGTCTGTGTACCGCTCAACTTCACCCAGCAGCAGCGGCTACAGTTCGAGCGCTGGAATGTC
GTGCTGGACAAGCCGGCAAGGTCACCATCACAGGCACCTGCAGAACTGGACGCCTGACCTCACCAACC
TCATGACAGCCAGCTGCTGGACCCACTGCCATCTTCTGGCGCAAGGAGGACTCGGATGCCATAGATTG
GAATGAGCCGACGCCCTGGAGTTTGGGGAGCGCCTGTCGGACCTGGCCAAGATCCGCAAGGTCATGTAC
TTCTCGTCACCTTTGGCGAGGGTGTGGAGCCCGCAACCTCAAGGCCTCCGTGGTTTTTAACCAGCTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221572 representing NM_006189
Red=Cloning site Green=Tags(s)

MAEDRPQQPQLDMPLVLDQGLTRQMRLRVESLQKQGEKRDGKLLQPAESVYRLNFTQQQLQFERWNV
VLDKPGKVTITGTSQNWTPDLNLMTRQLLDPTAIFWRKEDSDAIDWNEADALEFGERLSDLAKIRKVMY
FLVTFEGVEPANLKASVVFNQL

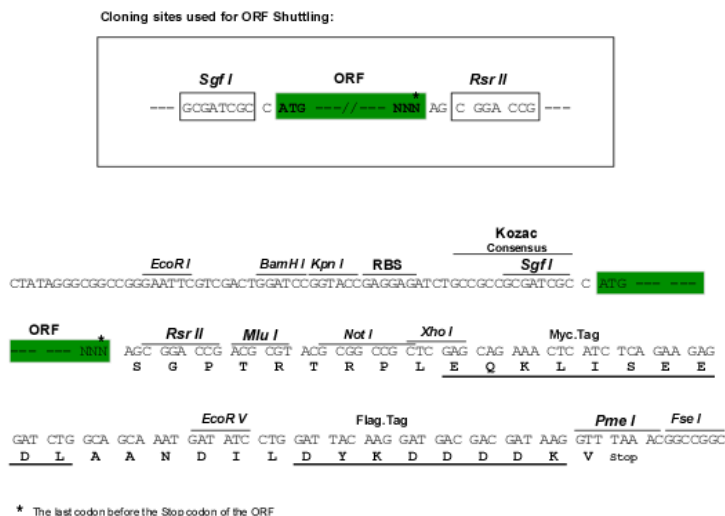
SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8042_f06.zip

Restriction Sites: SgfI-RsrII



[View online >](#)

Cloning Scheme:


ACCN: NM_006189

ORF Size: 489 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_006189.1](#), [NP_006180.1](#)

RefSeq Size: 492 bp

RefSeq ORF: 492 bp

Locus ID: 4975

UniProt ID: [P47874](#)

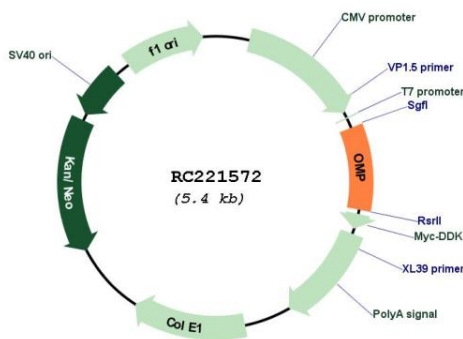
Cytogenetics: 11q13.5

Protein Families: Druggable Genome

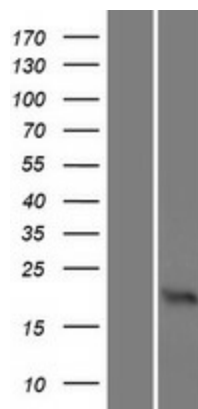
MW: 18.8 kDa

Gene Summary: Olfactory marker protein is uniquely associated with the mature olfactory receptor neurons in many vertebrate species from fish to man. The OMP gene structure and protein sequence are highly conserved between mouse, rat and human. Results of the mouse knockout studies show that OMP-null mice are compromised in their ability to respond to odor stimuli, and that OMP represents a novel modulatory component of the odor detection/signal transduction cascade. [provided by RefSeq, Jul 2008]

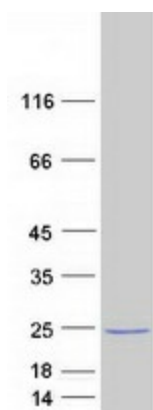
Product images:



Circular map for RC221572



Western blot validation of overexpression lysate (Cat# [LY416810]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221572 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OMP protein (Cat# [TP321572]). The protein was produced from HEK293T cells transfected with OMP cDNA clone (Cat# RC221572) using MegaTran 2.0 (Cat# [TT210002]).