

Product datasheet for **RG221572**

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: TurboGFP
Symbol: OMP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221572 representing NM_006189
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGAGGACAGGCCGAGCAGCCGACGCTGGACATGCCGCTGGTCTGGACCAGGGCCTGACCAGGC
 AGATGCGGCTACGCGTGGAGAGCCTGAAGCAGCGCGGGGAGAAGCGCCAGGATGGGGAGAAGCTGCTGCA
 GCCAGCGGAGTCTGTGTACCGCCTCAACTTCACCCAGCAGCAGCGGCTACAGTTCGAGCGCTGGAATGTC
 GTGCTGGACAAGCCGGGCAAGGTCACCATCACAGGCACCTCGCAGAACTGGACGCTGACCTCACCAACC
 TCATGACACGCCAGCTGCTGGACCCACTGCCATCTTCTGGCGCAAGGAGGACTCGGATGCCATAGATTG
 GAATGAGCCGACGCCCTGGAGTTTGGGAGCGCCTGTCGGACCTGGCCAAGATCCGCAAGGTCATGTAC
 TTCTCTGTCACCTTTGGCGAGGGTGTGGAGCCCGCAACCTCAAGGCCTCCGTGGTTTTTAACCAGCTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221572 representing NM_006189
 Red=Cloning site Green=Tags(s)

MAEDRPQQPQLDMPLVLDQGLTRQMRLRVESLQKQGEKRDGEKLLQPAESVYRLNFTQQQLQFERWNV
 VLDKPGKVTITGTSQNWTPDLTNLMTRQLLDPTAIFWRKEDSDAIDWNEADALEFGERLSDLAKIRKVMY
 FLVTFEGVEPANLKASVVFNQL

SGP**TRRRLE** - GFP Tag - V

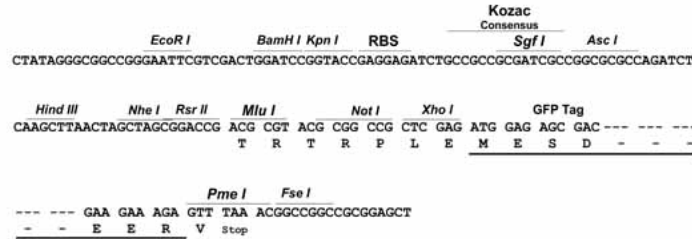
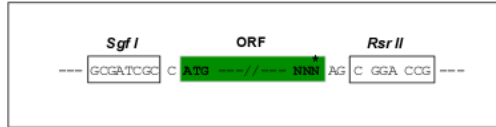
Restriction Sites: SgfI-RsrII



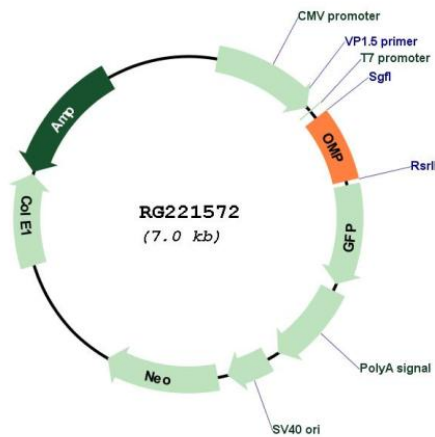
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Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



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:	<ol style="list-style-type: none">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
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]