

Product datasheet for **MG213187**

Olfr459 (NM_146576) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Olfr459
Synonyms:	MOR120-1
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG213187 representing NM_146576
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGATGGACAATCTCTAGTGCAACTGAATTCTGCCTTCTGGGTTCCCTGGATCCCAAGAGCTACACT
ACATCCTTTTTGCCATATTCTTTTCTTCTATTCACTGACACTGCTGGGAAACATGGTCATCATCATTAT
TGCTGTGTGATAAAGCTCTACAGTCCCCATGTACTTCTTCTGGGCAACCTCTCACTCCTGGAATC
CTGGTTACAACATAATTGTTCCCTTGATGCTTTGGGGCTTCTGCTCCCTGGAAGCAGACAATATCTC
TGAATGGATGCATTGCCCAACTCTTCTTTACCTCGCTCTAGGGACCACAGAGTTGCACTGCTTGGAGC
AATGGCTGTGGACCGTTATGTGGCTGTCTGTAATCCTTTGAGGTATAGCGTCATCATGAACAGCCGCACT
TGCACTCTGGGTGGTCATGGTGTCTGGATGTTTGGGTTCCTTTCTGAAATCTGGCCAGTCTATGCCACAT
TCCAGTTTACTTTCTGCAATCAAATCTCTTAGATCATTTTACTGCGACCGGGCCAATTGCTCAAATT
ATCTTGTAAATGAAACCTTTCTCACAGAGTTCACTTTTCTAATGGCTATTTTCAATTATTGTTGGATCC
TTGATCCCTACAATTGTCTCCTACACCTATATCATCTCCACCATCCTCAAGATCCCCTCAGCTTCTGGCC
GGAAGAAAGCCTTCTCCACCTGTGCCTCCCATTTCACTTTTGTGTGATTGGCTACGGCACCTGCTTGT
CCTCTATGTGAAACCTAAGCAAACACAGGCAGCAGAGTACAACAGAGTGGCCTCCCTGCTGGTTTCTGTG
GTCACGCCTTTTCTGAACCCCTTCACTTTCACACTTCGAAATGATAAAGTCAAAGAGGCCCTTAGAGATG
GAGTGAAGCGTTGCTGTCTGCTCCTCAGGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >MG213187 representing NM_146576
 Red=Cloning site Green=Tags(s)

MMDNLSSATEFCLLGFPQSQELHYILFAIFFFFYSVTLLGNMVIIIVCVDKRLQSPMYFFLGNLSLLEI
 LVTTTIVPLMLWGLLLPGKQTISLNGCIAQLFLYLALGTTEFAVLGAMAVDRYVAVCNPLRYSVIMNSRT
 CIWVVMVSWMFGLSEIWPVYATFQFTFCKSNLLDHFYCDRGQLKLSCNETFLTEFILFIMAIFIIVGS
 LIPTIVSYTYIISTILKIPSASGRKKAFTSCASHFTFVVIGYGTCLFLYVKKQTQAAEYNRVASLLVSV
 VTPFLNPFIFTLRNDKVKEALRDGVKRCCLLLRD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGCCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCCGCCGAGCT

- - E E R V Stop

ACCN: NM_146576

ORF Size: 942 bp

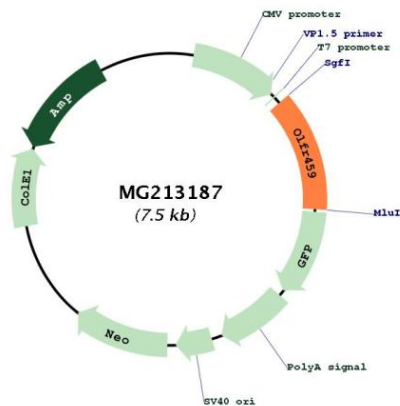
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_146576.1, NP_666787.1</u>
RefSeq Size:	945 bp
RefSeq ORF:	945 bp
Locus ID:	258569
Cytogenetics:	6 B2.1
Gene Summary:	Olfactory receptors interact with odorant molecules in the nose, to initiate a neuronal response that triggers the perception of a smell. The olfactory receptor proteins are members of a large family of G-protein-coupled receptors (GPCR) arising from single coding-exon genes. Olfactory receptors share a 7-transmembrane domain structure with many neurotransmitter and hormone receptors and are responsible for the recognition and G protein-mediated transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. The nomenclature assigned to the olfactory receptor genes and proteins for this organism is independent of other organisms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MG213187