

## Product datasheet for **MG213781**

### **Olfr410 (NM\_146707) Mouse Tagged ORF Clone**

#### Product data:

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Product Type:</b>             | Expression Plasmids     |
| <b>Tag:</b>                      | TurboGFP                |
| <b>Symbol:</b>                   | Olfr410                 |
| <b>Synonyms:</b>                 | MOR255-5; RP23-20M18.12 |
| <b>Mammalian Cell Selection:</b> | Neomycin                |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010) |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)  |

**ORF Nucleotide Sequence:** >MG213781 representing NM\_146707  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGCAGCCAAAGCCTAGAGCCAATGGAACCACTATTACTGAATTCATTCTGCTGGGTTTGGTGGAGACAC  
CAGAGCTGTGGCACTTGTCTTCACTCTTCTCTTGGCTTACATGACAACAGTTGGAGGTAACCTGAG  
CATCTGGCTGCTGTCTTGGTGAACCAAACTGCACACCCCATGTACTTCTTCTGGGAATCTGTCA  
GTGATGGATGTGGGTGTATCAGTGTCACTATTCCTCCATGTTGGTTCGGCTCTTAGTCCATAAGCGTA  
CAATTCATATGGAGACTGCCTCACACAGCTCTTCTTCTCCATCTGCTAGTTGGGTTGACTGCTTCTCT  
ATTGACAGCCATGGCTTATGATCGCTTCTGGCCATCTGCCGGCCCTCACTTACAGCACCCGAATGAAC  
CACACTATCCAGAGGATCTTGGTGGCTACGTCTGGGCTTGTGCCTTCAGCAATGCACTGACTCACACTG  
TAGCCATATCCACACTTCACTTCTGTGGCCCAATGTGATCAATCACTTCTACTGTGACTTGCCCTCAGCT  
CTTCCAGCTGTCTGCTCCAGTACCCAGCTCAATGAGCTGTTGCTCTTTGGAGTGGGTTTCATCATGGCA  
GGAACCCCATGGCACTCATTTTCACTCTTATATGCATGTGGCAGCTGCAGTTCTGCGAATCCGCTCTG  
CTGAAGGCAGAAAGAAAGCTTTCTCCATGCAGCTCTCACCTCACTGTGGTTGCCATATTCTATGGTGC  
TGGCATCTTTAACTACATGAGACTTGGTTCCACCAAATTTTCTAGATAAGGATAAAGCTATTGGTATTTTC  
AACACTGTCAATCAACCTATGCTGAACCACTCATCTACAGTCTCAGGAACCTGATGTGCAGGCTGCC  
TCTGGAGGGTACTCACAGGAGACGGCCAGCAGCT

**ACGGT**ACGGCGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >MG213781 representing NM\_146707  
Red=Cloning site Green=Tags(s)

MQPKPRANGTTITEFILLGLVETPELWPLVFILFLAYMTTVGGNLSILAAVLVEPKLHTPMYFFLGNL  
VMDVGCISVTIPSMVLRLVHKRTIPYGDCLTQLFFHLLVGVDCLLTAMAYDRFLAICRPLTYSTRMN  
HTIQRLVATSWACAFSNALHTVAISTLHFCGPNVINHFYCDLPQLFQLSCSSTQLNELLLFGVGFIMA  
GTPMALIFTSYMHVAAVLRIRSAEGRKKAFSTCSSHLTVVAIFYGAGIFNYMRLGSTKLSDKDKAIGIF  
NTVINPMLNPLIYSLRNPVQAAALWRVLTGRRPAA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



CTATAGGGCGCGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGCCGCGCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGTAGCGGACCG 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 ACGGCCGCCGCGGAGCT

- - E E R V Stop

**ACCN:** NM\_146707

**ORF Size:** 945 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:** [NM\\_146707.1](#), [NP\\_666918.1](#)

**RefSeq Size:** 948 bp

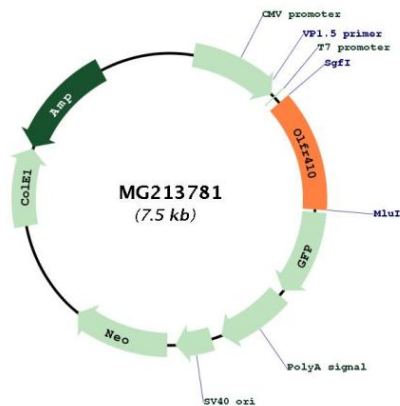
**RefSeq ORF:** 948 bp

**Locus ID:** 258702

**Cytogenetics:** 11 B5

**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 MG213781