

Product datasheet for **RG218457**

Olfactory receptor 10X1 (OR10X1) (NM_001004477) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Olfactory receptor 10X1 (OR10X1) (NM_001004477) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OR10X1
Synonyms:	OR1-13; OR1-14; OR10X1P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218457 representing NM_001004477 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGTGAATGTTTATTGTTGTTTCTTTCAAATTTTCAGACATTCAAACGATGAAGATCAACCAGACAA
TCCTGAAGGAATTCATTCTTGTGGCTTTTCTGTGTACCCACATGTACAGACATTTCTTTTGTGGTCTT
CTTTTGTCTCTACCTTCTCACCTTGCAGGTAATCTGATCATCATGGGTCTAACTGGGTGGACAGGTCC
CTCCACACCCCTATGTATCTCTCCTTAGTGCCTCTCCTTCTCTGAGACCTGCTATACGCTGACCATCG
TCCCAAGATGCTGGAAGATCTACTGGCCAAGGACAGAAGCATTTCAGTACAGGTTGTAGCTTACAGAT
GTGCTTCTTCTGGGACTTGGTGGCACAACACTGTATCATTCTCACTTTGATGGGATATGACCGCTTCTCTG
GCCATCTGTAACCCTCTAAGATATCCACTGCTTATGACCAACATTGTATGTGGACAACCTGTGGCCTCTG
CTTGCACTGCAGGCTTCTTATCTCTTACAGAGACTGCACTGATTCAGGGACTCTTTCTGCAGACC
CAACCTTGTCAAACACTTCTTCTGCCATATGCTGGCAGTTATTAGGCTGTCTTGTATAGACAGTAACCAC
ACAGAATTCATTATAACTGATCTCAGTGTCTGGTTTGTCTGGTACCCTTCTGCATCATCCTGACTG
ATGTCTTATTATTTCTACTGCCTCAGGATCCCTTACGCTGAGGGCAAGCAGAAGGCCTTACCACCTG
TGCTCCACCTCACCGTGGTTATAATCCACTTTGGTTTTGCATCTATTGTTTATTTGAAGCCAGAAGCC
TCAGGAGATGACACACTCATAGCAGTCCCTTATACTGTCTATTACCCCTTCTCAGCCCCATCATATTCA
GCCTGAGGAATAAGGACATGAAAAATGCTTTTGAAGAATGATGGGAAACACAGTTGCCTTGAAAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG218457 representing NM_001004477
 Red=Cloning site Green=Tags(s)

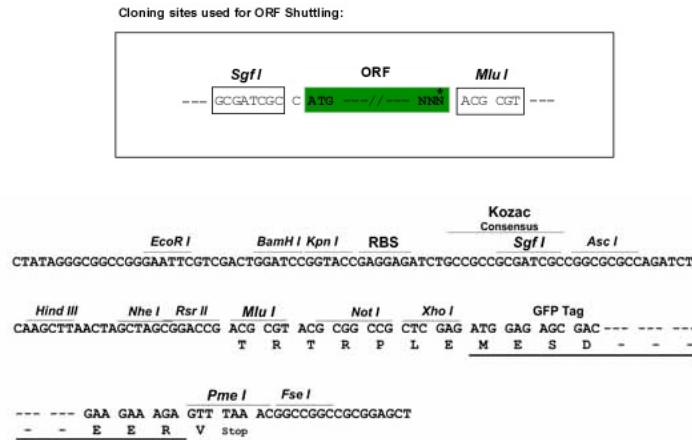
MVLNVYCCFFQISDIQTMKINQILKEFILVGFVYPHVQTFLLVVFVFLYLLTLAGNLIIMGLTWVDRS
 LHTPMYLFLSALSFSSETCYLTIIVPKMLEDLLAKDRSISVTGCSLQMCFFLGLGGTNCIILTLMGYDRFL
 AICNPLRYPLMTNIVCGQLVASACTAGFFISLTETALIFRDSFCRPNLVKHFFCHMLAVIRLSCIDSNH
 TEFIIITLISVSGLLGTLILLIILTDVFIISTVLRIPSAEGKQKAF TTCASHLTVVIIHFGFASIVYLKPEA
 SGDDTLIAVPYTVITPFLSPIIFSLRNKDMKNAFRRMMGNTVALKK

TRTRPLE - GFP Tag - V

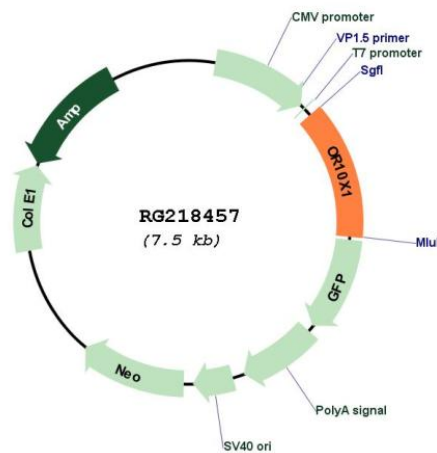
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001004477

ORF Size: 978 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_001004477.1 , NP_001004477.1
RefSeq Size:	981 bp
RefSeq ORF:	981 bp
Locus ID:	128367
UniProt ID:	Q8NGY0
Cytogenetics:	1q23.1
Protein Families:	Transmembrane
Protein Pathways:	Olfactory transduction
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. This olfactory receptor gene is a segregating pseudogene, where some individuals have an allele that encodes a functional olfactory receptor, while other individuals have an allele encoding a protein that is predicted to be non-functional. [provided by RefSeq, Jun 2015]