

Product datasheet for RC218457

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:	Myc-DDK
Symbol:	Olfactory receptor 10X1
Synonyms:	OR1-13; OR1-14; OR10X1P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218457 representing NM_001004477 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGTTGAATGTTTATTGTTGTTTCTTTCAAATTTTCAGACATTCAAACGATGAAGATCAACCAGACAA
TCCTGAAGGAATTCATTCTTGTGGCTTTCTGTGTACCCACATGTACAGACATTTCTTTTGTGGTCTT
CTTTTGTCTCTACCTTCTCACCTTGCAGGTAATCTGATCATCATGGGTCTAACTGGGTGGACAGGTCC
CTCCACACCCCTATGTATCTCTCCTTAGTGCCTCTCCTCTCTGAGACCTGCTATACGCTGACCATCG
TCCCAAGATGCTGGAAGATCTACTGGCCAAGGACAGAAGCATTTCAGTACAGGTTGTAGCTTACAGAT
GTGCTTCTTCTGGGACTTGGTGGCACAACACTGTATCATTCTCACTTTGATGGGATATGACCGCTTCTCTG
GCCATCTGTAACCCTCTAAGATATCCACTGCTTATGACCAACATTGTATGTGGACAACCTGTGGCCTCTG
CTTGCACTGCAGGCTTCTTATCTCTCTTACAGAGACTGCACTGATTCAGGGACTCTTCTGCAGACC
CAACCTTGTCAAACACTTCTTCTGCCATATGCTGGCAGTATTAGGCTGTCTTGTATAGACAGTAACCAC
ACAGAATTCATTATAACACTGATCTCAGTGTCTGGTTTGTCTGGTACCCTTCTGCATCATCCTGACTG
ATGTCTTCATTATTTCTACTGCCTCAGGATCCCTTACGCTGAGGGCAAGCAGAAGGCCTTACCACCTG
TGCTCCACCTCACCGTGGTTATAATCCACTTTGGTTTTGCATCTATTGTTTATTTGAAGCCAGAAGCC
TCAGGAGATGACACACTCATAGCAGTCCCTTATACTGTCTATTACCCCTTCTCAGCCCCATCATATTCA
GCCTGAGGAATAAGGACATGAAAAATGCTTTTGAAGAATGATGGGAAACACAGTTGCCTTGAAAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218457 representing NM_001004477
Red=Cloning site Green=Tags(s)

MVLNVYCCFFQISDIQTMKINQILKEFILVGFVYPHVQTFLLVVFVFLYLLTLAGNLIIMGLTWVDRS
 LHTPMYLFLSALSFSETCYLTIIVPKMLEDLLAKDRSISVTGCSLQMCFFLGLGGTNCIILTLMGYDRFL
 AICNPLRYPLLMTNIVCGQLVASACTAGFFISL TETALIFRDSFCRPNLVKHFFCHMLAVIRLSCIDSNH
 TEFIITLISVSGLLGTLILLIILTDVFIISTVLRIPSAEGKQKAF TTCASHLTVVIIHFGFASIVYLKPEA
 SGDDTLIAVPYTVITPFLSPIIFSLRNKDMKNAFRRMMGNTVALKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8002_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



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:

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

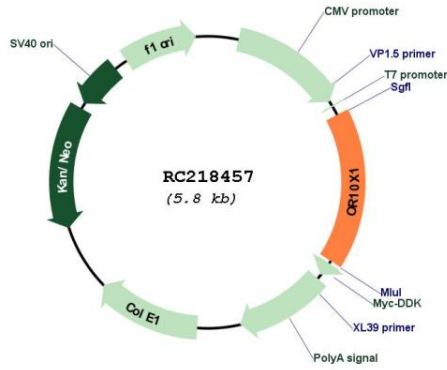
Protein Families: Transmembrane

Protein Pathways: Olfactory transduction

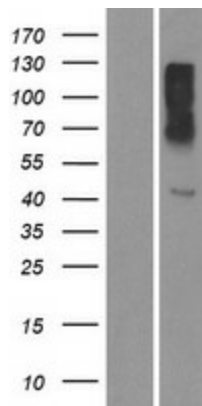
MW: 36.3 kDa

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]

Product images:



Circular map for RC218457



Western blot validation of overexpression lysate (Cat# [LY423780]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218457 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).