

## Product datasheet for RC222225

### OR10T2 (NM\_001004475) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: OR10T2 (NM\_001004475) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: OR10T2  
 Synonyms: OR1-3  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC222225 representing NM\_001004475  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGCGAGGTTTCAACAAAACCACTGTGGTTACACAGTTCATCCTGGTGGGTTTCTCCAGCCTGGGGAGC  
 TCCAGCTGCTGCTTTTGTGTCATCTTTCTCTCCTATACTTGACAATCCTGGTGGCCAATGTGACCATCAT  
 GGCCGTTATTCGCTTCAGCTGGACTCTCCACACTCCCATGTATGGCTTTCTATTCATCCTTTTCAATTTCT  
 GAGTCTGCTACACTTTTGTGTCATCATCCCTCAGCTGCTGGTCCACCTGCTCTCAGACACCAAGACCATCT  
 CCTTCATGGCCTGTGCCACCCAGCTGTTCTTTTCTGGCTTTGCTTGACCAACTGCCTCCTCATTGC  
 TGTGATGGGATATGATCGCTATGTAGCAATTTGTACCCTCTGAGGTACACACTCATATAAACAAGG  
 CTGGGGTTGGAGTTGATTTCTCTCTCAGGAGCCACAGTTTCTTTATTGCTTTGGTGGCCACCAACCTCA  
 TTTGTGACATGCGTTTTTGTGGCCCAACAGGGTTAACCACTATTTCTGTGACATGGCACCTGTTATCAA  
 GTTAGCCTGCACTGACACCCATGTGAAAGAGCTGGCTTTATTTAGCCTCAGCATCCTGGTAATTATGGTG  
 CCTTTTCTGTTAATTCTCATATCCTATGGCTTCATAGTTAACACCATCCTGAAGATCCCCCTCAGCTGAGG  
 GCAAGAAGGCCTTTGTACCTGTGCCTCACATCTCACTGTGGTCTTTGTCCACTATGGCTGTGCCTCTAT  
 CATCTATCTGCGCCCAAGTCCAAGTCTGCCTCAGACAAGGATCAGTTGGTGGCAGTGACCTACACAGTG  
 GTTACTCCCTTACTTAATCCTCTTGTCTACAGTCTGAGGAACAAGAGGTAACAACTGCATTGAAAAGAG  
 TTCTTGAATGCCTGTGGCAACCAAGATGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC222225 representing NM\_001004475  
Red=Cloning site Green=Tags(s)

MRGFNKTTVVTTQFILVGFSSLGELQLLLFVIFLLLYLTLVANVTIMAVIRFSWTLHTPMYGFLFIFSFS  
 ESCYTFV IIPQLLVHLLSDTKTISFMACATQLFFFLGFACTNCLLIAMGYDRYVAICHPLRYTLIINKR  
 LGLELISLSGATGFFIALVATNLICDMRF CGPNRVNHYFCMAPVIKLACTDTHVKELALFSL SILVIMV  
 PFLLLILISYGFIVNTILKIPSAEGKKAFTVCASHLTVV FVHYGCASIIYLRPKSKSASDKDQLVAVTYTV  
 VTPLLNLVYSLRNKEVKTALKRVLGMPVATKMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8002\\_b10.zip](https://cdn.origene.com/chromatograms/mk8002_b10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001004475

**ORF Size:** 942 bp

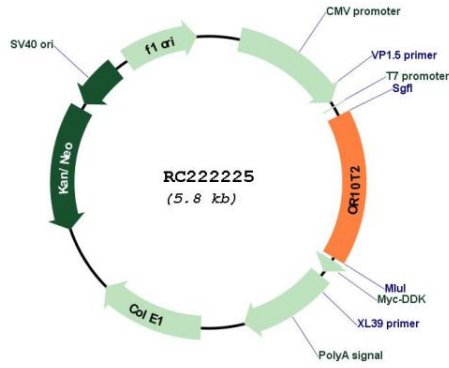
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

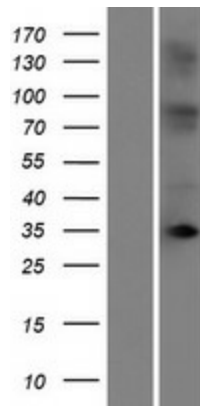
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001004475.1</a></u> , <u><a href="#">NP_001004475.1</a></u>
<b>RefSeq Size:</b>	945 bp
<b>RefSeq ORF:</b>	945 bp
<b>Locus ID:</b>	128360
<b>UniProt ID:</b>	<u><a href="#">Q8NGX3</a></u>
<b>Cytogenetics:</b>	1q23.1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Olfactory transduction
<b>MW:</b>	34.8 kDa
<b>Gene Summary:</b>	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 RC222225



Western blot validation of overexpression lysate (Cat# [LY423778]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222225 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).