

## Product datasheet for RC212402

### OR4N5 (NM\_001004724) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OR4N5 (NM_001004724) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR4N5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212402 representing NM_001004724 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGATCGCC

ATGGAACACAGAACCTCACAGTGGTGACAGAATTCATTCTTCTGGTCTGACCCAGTCTCAAGATGCTC  
AACTTCTGGTCTTTGTGCTAGTCTTAATTTTCTACCTTATCATCCTCCCTGAAATTTCTCATATTTT  
CACCATAAAGTCAGACCCCTGGGCTCACAGCCCCCTCTATTTCTTCTGGGCAACTTGGCCTTACTGGAT  
GCATCCTACTCCTTCATTGTGGTTCCCAGGATGTTGGTGGACTTCCTCTCTGAGAAGAAGGTAATCTCCT  
ATAGAAGCTGCATCACTCAGCTTTTTTCTTGCATTTTCTTGGAGCGGGAGAGATGTTCCCTCGTTGT  
GATGGCCTTTGACCGCTACATCGCCATCTGCCGGCCTTTACACTATTCAACCATCATGAACCCTAGAGCC  
TGCTATGCATTATCGTTGGTTCTGTGGCTTGGGGCTTTATCCATTCCATTGTACAAGTAGCCCTTATCC  
TGCACTTGCCCTTCTGTGGCCAAACCAGCTCGATAACTTCTTCTGTGATGTTCCACAGGTCAACAAGCT  
GGCCTGCACCAATACCTTTGTGGTGGAGCTTCTGATGGTCTCCAACAGTGGCCTGCTCAGCCTCCTGTGC  
TTCCTGGGCTTCTGGCCTCCTATGCAGTCATCCTCTGTCGTATAAGGGAGCACTCCTCTGAAGGAAAGA  
GCAAGGCTATTTCCACATGCACCACCCATATTATCATTATATTTCTCATGTTGGACCTGCTATTTTCAT  
CTACACTTGCCCTTCCAGGCTTTCCAGCTGACAAGGTAGTTTCTTTTCCATACTGCATCTTTCTCCT  
TTGATGAACCCTGTTATTTATACGTTTCGCAACCAGGAGGTGAAAGCTTCCATGAGGAAGTTGTTAAGTC  
AACATATGTTTTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC212402 representing NM\_001004724  
Red=Cloning site Green=Tags(s)

METQNLTVVTEFILLGLTQSQAQLLVFVLVLIIFYLIILPGNFLIIFTIKSDPGLTAPLYFFLGNLALLD  
 ASYSFIVVPRMLVDFLSEKKVISYRSCITQLFFLHFLGAGEMFLLVVMFDRYIAICRPLHYSTIMNPRA  
 CYALSLVLWLGFIHSIVQVALILHLPFCGPNQLDNFFCDVPQVIKLACTNTFFVELLMVSNGLLSLLC  
 FLGLLASYAVILCRIREHSSEKSKAISTCTTHIIIIIFLMFGPAIFIYTCPFQAFPADKVVSLFHTVIFP  
 LMPVVIYTLRNQEVKASMRKLLSQHMFC

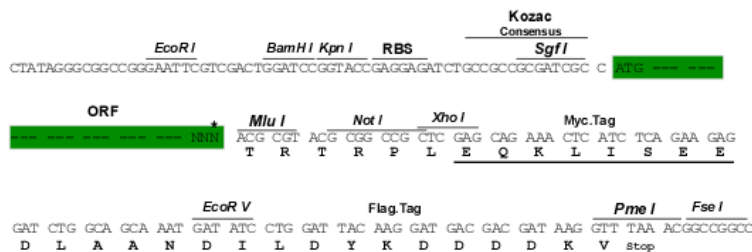
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8002\\_f08.zip](https://cdn.origene.com/chromatograms/mk8002_f08.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001004724

**ORF Size:** 924 bp

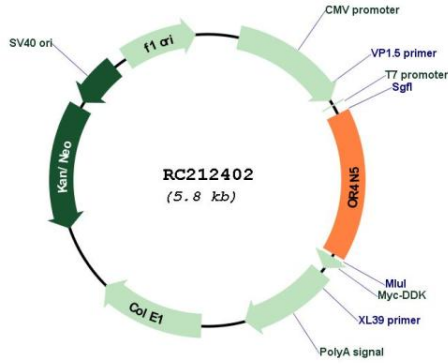
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

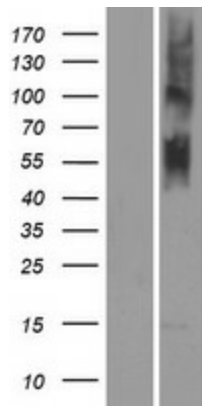
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>NM_001004724.1, NP_001004724.1</u>
<b>RefSeq Size:</b>	927 bp
<b>RefSeq ORF:</b>	927 bp
<b>Locus ID:</b>	390437
<b>UniProt ID:</b>	<u>Q8IXE1</u>
<b>Cytogenetics:</b>	14q11.2
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Olfactory transduction
<b>MW:</b>	34.5 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 RC212402



Western blot validation of overexpression lysate (Cat# [LY423907]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212402 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).