

## Product datasheet for RC218666

### OR5AU1 (NM\_001004731) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OR5AU1 (NM_001004731) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR5AU1
Synonyms:	OR14-38
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218666 representing NM_001004731 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACAGAGTTTCATCTGCAAAGCCAAATGCCCTCAATAAGACTCATCTTCAGAAGGCTGTCCTTAGGCA  
GAATTAACCCAGTCAGAGCCCCAGGTGTTCAACCTCATTTATGGTGGTGCCTTCTTTCTCCATCGCAGA  
GCACTGGAGAAGGATGAAAGGGGCAAACCTGAGCCAAGGGATGGAGTTTGGCTCTTGGCCTCACCCT  
GACCCCGAGCTCCAGAGGCTGCTCTTCGTGGTGTTCCTGGCATGTACACAGCCACTCTGCTGGGAACC  
TGGTCATGTTCTCCTGATCCATGTGAGTGCCACCCTGCACACCCCATGTACTCCCTCCTGAAGAGCCT  
CTCCTTCTGGATTTCTGCTACTCCTCCACGGTTGTGCCCCAGACCCTGGTGAACCTCTTGCCAAAGAGG  
AAAGTGATCTCTATTTGGCTGCATGACTCAGATGTTCTTCTATGCGGGTTTTGCCACCAGTGAGTGCT  
ATCTCATCGCTGCCATGGCCTATGACCGCTATGCCGCTATTTGTAACCCCTGCTCTACTCAACCATCAT  
GTCTCCTGAGGCTGTGCCTCGCTGATTGTGGGCTCCTACAGTGCAGGATTCCTCAATTCTCTTATCCAC  
ACTGGCTGTATCTTTAGTCTGAAATCTGCGGTGCTCATGTGCTCACTTCTTCTGTGATGGCCAC  
CCATCCTGTCCTGTCTGTGTAGACACCTCACTGTGTGAGATCCTGCTTCTATTTTGGCTGGTTTCAA  
CCTTTTGGAGTGCACCCCTACCATCTTGATCTCCTACTTCTTAATTCTCAACACCATCCTGAAAATGAGC  
TCGGCCCAGGGCAGGTTTAAGGCATTTCCACCTGTGCATCCCACCTCACTGCCATGCTCTTCTTTG  
GCACAACACTTTTTATGTACCTGCGCCCCAGGTCCAGCTACTCCTTGACCCAGGACCGCACAGTTGCTGT  
CATCTACACAGTGGTATCCCAGTGCTGAACCCCTCATGTACTCTTTGAGAAACAAGGATGTGAAGAAA  
GCTTTAATAAAGGTTTGGGGTAGAAAACAATGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC218666 representing NM\_001004731  
Red=Cloning site Green=Tags(s)

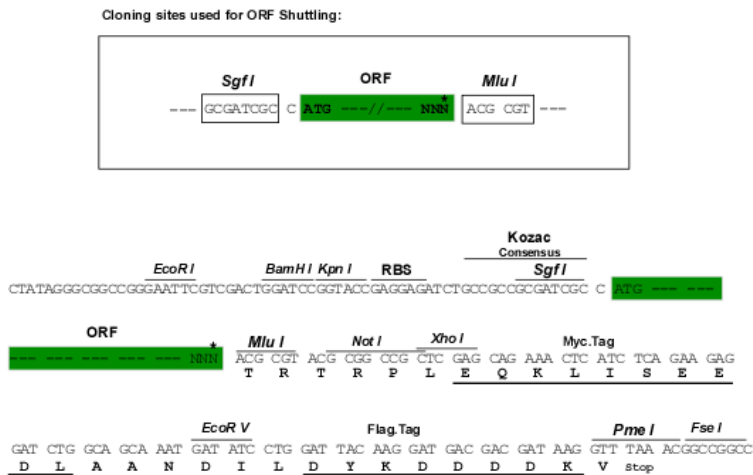
MTEFHLQSQMPSIRLIFRRLSLGRIKPSQSPRCSTSFMVVPSFSIAEHWRRMKGANLSQGMFELLGLTT  
 DPQLQRLLFVVFLGMYTATLLGNLVMFLLIHVSATLHTPMYSLKSLSFLDFCYSSVVPQTLVNFLAKR  
 KVISYFGCMTQMFFYAGFATSECYLIAAMAYDRYAAICNPLLYSTIMSPEVCASLIVGSYSAGFLNSLIH  
 TGCIFSLKFCGAHVVTHFFCDGPPILSLSCVDTSLSCEILLFIFAGFNLLSCTLTILISYFLILNTILKMS  
 SAQGRFKAFSTCASHLTAICLFFGTTLFMYLRPRSSYSLTQDRTVAVIYTVVIVPLNPLMYSLRNKDVKK  
 ALIKVWGRKTME

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8002\\_g03.zip](https://cdn.origene.com/chromatograms/mk8002_g03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_001004731

**ORF Size:** 1086 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\\_001004731.1](#), [NP\\_001004731.1](#)

**RefSeq Size:** 1089 bp

**RefSeq ORF:** 936 bp

**Locus ID:** 390445

**UniProt ID:** [Q8NGC0](#)

**Cytogenetics:** 14q11.2

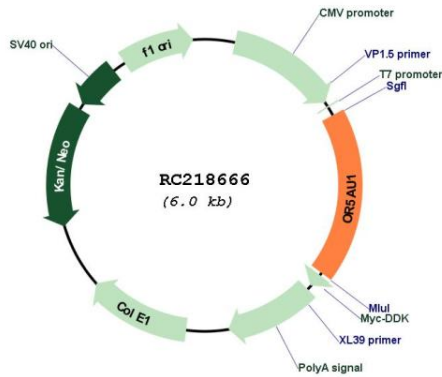
**Protein Families:** Transmembrane

**Protein Pathways:** Olfactory transduction

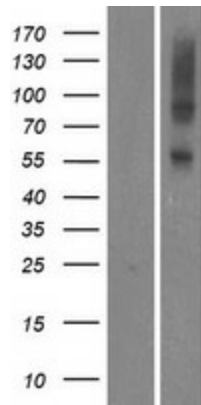
**MW:** 40.5 kDa

**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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC218666



Western blot validation of overexpression lysate (Cat# [LY423914]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218666 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).