

## Product datasheet for RC214747

### OR2A42 (NM\_001001802) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OR2A42 (NM_001001802) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR2A42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214747 representing NM_001001802 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCACAGAGTTCTCCTACTGGGATTTCTCCTGGGCCAAGGATTCAGATGCTCCTTTGGGCTCT  
TCTCCCTGTTCTATATCTTCACCTGCTGGGAACGGGGCCATCCTGGGGCTCATCTCACTGGACTCCAG  
ACTCCACACCCCATGTACTTCTCCTCTCACACCTGGCTGTCGTCGACATCGCCTACACCCGCAACACG  
GTGCCCCAGATGCTGGCGAACCTCCTGCATCCAGCCAAGCCATCTCCTTTGCTGGTTGCATGACGCAGA  
CCTTTCTCTGTTGAGTTTTGGACACAGCGAATGTCTCCTGCTGATGTCCTACGATCGTTACGT  
GGCCATCTGCCACCCTCTCCGATACTCCGTCATCATGACCTGGAGAGTCTGCATCACCCCTGGCCGTCAT  
TCCTGGACGTGTGGCTCCCTCCTGGCTCTGGCCATGTGGTTCTCATCCTAAGACTGCCCTTCTCTGGC  
CTCATGAAATCAACCACTTCTTCTGTGAAATCCTGTCTGTCTCAGGCTGGCCTGTGCTGACACCTGGCT  
CAACCAGGTGGTCATCTTTCAGCCTGCGTGTCTTCTGCTGGGGCCACCCAGCCTGGTCTTGTCTCC  
TACTCGCACATCCTGGCGCCATCCTGAGGATCCAGTCTGGGGAGGGCCGAGAAAGCCTTCTCCACCT  
GCTCCTCCACCTCTGCGTGGTGGGACTCTTCTTGGCAGTGCCATCATCATGTACATGGCCCCAAGTC  
CCGCCATCCTGAGGAGCAGAAAAGTCTTTTTTCTATTTTACAGTTTTTCAACCAACACTTAACCCC  
CTGATTTACAGCCTGAGGAACGGAGAGGTCAAGGGTGCCTGAGGAGAGCACTGGCAAGGAAAGTCATT  
CC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC214747 representing NM\_001001802  
Red=Cloning site Green=Tags(s)

MVTEFLLLGFLLPRIQMLLFGFLSFLFYIFTLLGNGAILGLISLDSRLHTPMYFFLSHLAVVDIAYTRNT  
 VPQMLANLLHPAKPISFAGCMTQTFCLCSFGHSECLLLVMSYDRYVAICHPLRYSVIMTWRCITLAVT  
 SWTCGSLALAHVVLILRLPFSGPHEINHHFCEILSVLRLACADTWNQVVIFAACVFFLVGPPSLVLVS  
 YSHILAAILRIQSGEGRRKAFSTCSSHLCVVGLFFGSAIIMYMAPKSRHPPEEQKVFFLFYSFFNPTLNP  
 LIYSLRNGEVKALRRALGKESH

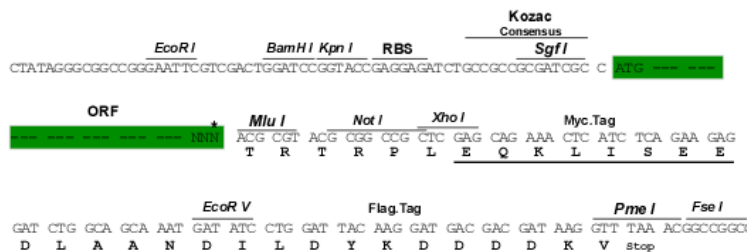
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8001\\_c03.zip](https://cdn.origene.com/chromatograms/mk8001_c03.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\_001001802

**ORF Size:** 912 bp

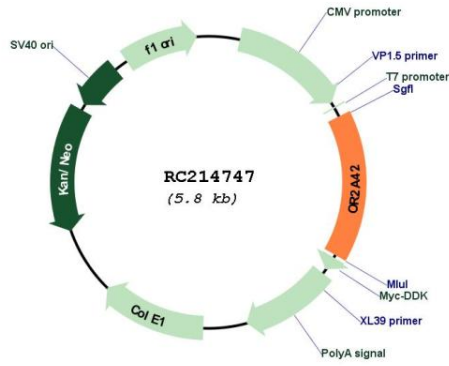
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

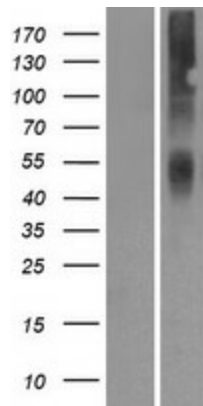
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<a href="#">NM_001001802.1</a> , <a href="#">NP_001001802.1</a>
<b>RefSeq Size:</b>	933 bp
<b>RefSeq ORF:</b>	933 bp
<b>Locus ID:</b>	402317
<b>UniProt ID:</b>	<a href="#">Q8NGT9</a>
<b>Cytogenetics:</b>	7q35
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Olfactory transduction
<b>MW:</b>	34.1 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 RC214747



Western blot validation of overexpression lysate (Cat# [LY424247]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214747 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).