

## Product datasheet for **RC221691**

### OR10H2 (NM\_013939) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | OR10H2 (NM_013939) Human Tagged ORF Clone                         |
| Tag:                      | Myc-DDK   |
| Symbol:                   | OR10H2  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | >RC221691 ORF sequence<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGGGGCTAAACCACACCTCCATGTCTGAATTCATCCTCGTCGGCTTCTCTGCCTTCCCCACCTCC  
AACTGATGCTCTTCCTGCTGTTCTGCTGATGTACCTGTTCACTGCTGGGCAACCTGCTCATCATGGC  
CACCGTCTGGAGCGAGCGCAGCCTCCACACGCCATGTACCTCTCCTGTGCGTCTCTCAGTCTCCGAG  
ATCCTCTACACCGTGGCCATCATCCCGCGCATGTGGCCGACCTGCTGTCCACCCAGCGCTCCATCGCT  
TCCTGGCCTGTGCCAGTCAGATGTTCTTCTCCTTCAGCTTTGGCTCACCCACTCCTTCTGCTCACCGT  
CATGGGCTACGACCGCTACGTGGCCATCTGCCACCCCTGCGCTACAACGTGCTCATGAGCCCACGGGGC  
TGCGCCTGCCTGGTGGGCTGCTCCTGGGCTGGTGGCTCGGTCATGGGGATGGTGGTGACCTCGGCCATTT  
TCCAAGTACTTTCTGTGGATCCCATGAGATCCAGCATTTTTATGTCATGTGCCACCTCTGTTGAAGTT  
GGCCTGTGAAATAATGTACCAGCTGTGGCCCTGGGCGTGGGCTTGGTATGTATCATGGCACTGCTGGC  
TGTTTTCTCCTCATCCTCCTCTCCTATGCCTTCATCGTGGCCGACATCTGAAGATCCCTTCTGCTGAAG  
GTCGGAACAAGGCCTTCCACCTGTGCCTCTCACCTATTGTGGTCATTGTGCACTATGGCTTTGCCTC  
TGTCATCTACCTCAAGCCAAAGGTCCCCTCTCAGGAGGTGACACCCTGATGGCCACCCTACGCA  
GTCCTCAGCCCTTCTCAGCCCATCATCTTCAGCCTCAGGAACAAAGAACTGAAGGTTGCCATGAAGA  
GGACCTTCTCAGCACACTCTATTCTCAGGCACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC221691 protein sequence  
Red=Cloning site Green=Tags(s)

MLGLNHTSMSEFILVGFSAFPHLQLMLFLLFLLMYLFTLLGNLLIMATVWSERSLHTPMYLFCLVLSVSE  
 ILYTVAIIPRMLADLLSTQRSIAFLACASQMFSSFSFGFTHSFLLTVMGYDRYVAICHPLRYNVLMSPRG  
 CACLVGCSWAGGSVMGMVVTSAIFQLTFCGSHEIQHFLCHVPLLKLACGNNVPAVALGVLVCIMALLG  
 CFLLILLSYAFIVADILKIPSAEGRNKAFSTCASHLIVVIVVHYGFASVIYLPKPGPHSQEGDTLMATTYA  
 VLTFFLSPIIFSLRNKELKVAMKRTFLSTLYSSGT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6474\\_d06.zip](https://cdn.origene.com/chromatograms/mk6474_d06.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\_013939

**ORF Size:** 947 bp

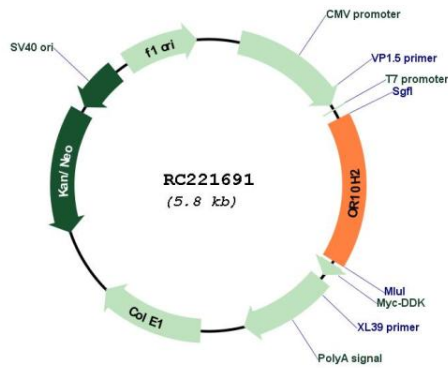
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

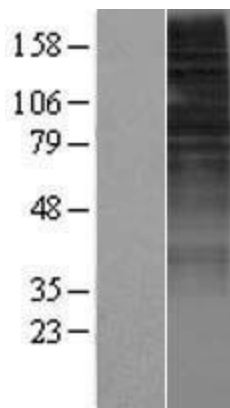
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

|                               |  |
|-------------------------------|--|
| <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_013939.2</a> , <a href="#">NP_039227.1</a>  |
| <b>RefSeq Size:</b>           | 1029 bp  |
| <b>RefSeq ORF:</b>            | 948 bp   |
| <b>Locus ID:</b>              | 26538  |
| <b>UniProt ID:</b>            | <a href="#">O60403</a>   |
| <b>Cytogenetics:</b>          | 19p13.12   |
| <b>Protein Families:</b>      | Druggable Genome, Transmembrane  |
| <b>Protein Pathways:</b>      | Olfactory transduction   |
| <b>MW:</b>                    | 34.7 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 RC221691



Western blot validation of overexpression lysate (Cat# [LY415591]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221691 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).