

## Product datasheet for **RG216486**

### OR1J2 (NM\_054107) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | OR1J2 (NM_054107) Human Tagged ORF Clone                                    |
| Tag:                      | TurboGFP  |
| Symbol:                   | OR1J2   |
| Synonyms:                 | HG152; HSA5; OR1J3; OR1J5; OR9-19; OST044                                   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)   |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| ORF Nucleotide Sequence:  | >RG216486 representing NM_054107<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCCCTGAGAACCAGAGCAGCGTGTCCGAGTTCCTCCTTCTGGGCCTCCCCATCCGGCCAGAGCAGC  
AGGCTGTGTTCTCACCCTGTTCTGGGCATGTACCTGACCACGGTGCTGGGGAACCTGCTCATCATGCT  
GCTCATCCAGCTGGACTCTCACCTTCACACCCCATGTAATCTCCTCAGCCACTTGGCTCTCACTGAC  
ATCTCCTTTTCATCTGCACTGTCCCTAAGATGCTGATGGACATGCGGACTAAGTACAAATCGATCTCT  
ATGAGGAATGCATTTCTCAGATGATTTTTTTATATTTTTTACTGACCTGGACAGCTTCCTTATTACATC  
AATGGCATATGACCGATATGTTGCCATATGTCACCCTCTCCACTACACTGTCATCATGAGGGAAGAGCTC  
TGTGTCTTCTTAGTGGCTGTATCTTGGATTCTGTCTTGTGCCAGCTCCCTCTCTCACACCTTCTCCTGA  
CCCGGCTGCTTTCTGTGCTGCGAACACCATCCCCATGTCTTCTGTGACCTTGGTGCCTGCTCAAGCT  
GTCCTGCTCAGATATCTTCTCAATGAGCTGGTCATGTTACAGTAGGGGTGGTGGTCATTACCCTGCCA  
TTCATGTGTATCCTGGTATCATATGGCTACATTGGGGCCACCATCCTGAGGGTCCCTTCAACCAAAGGGA  
TCCACAAAGCATTGTCCACATGTGGCTCCCATCTCTGTGGTGTCTCTATTATGGGTCAATATTTGG  
CCAGTACCTTTTCCGACTGTAAGCAGTTCTATTGACAAGGATGTCATTGTGGCTCTCATGTACACGGTG  
GTCACACCCATGTTGAACCCCTTATCTACAGCCTTAGGAACAGGGACATGAAAGAGGCCCTTGGGAAAC  
TCTTCAGTAGAGCAACATTTTTCTCTTGG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG216486 representing NM\_054107  
Red=Cloning site Green=Tags(s)

MSPENQSSVSEFLLLGLPIRPEQQAVFFTLFLGMYLTTVLGNLLIMLLIQLDShLHTPMYFFLSHLALTD  
 ISFSSVTVPKMLMDMRTKYKSILYEECISQMYFFIFFTDLDSFLITSMAYDRYVAICHPLHYTVIMREEL  
 CVFLVAVSWILSCASSLSHTLLLRSLFCAANTIPHFVCDLAALLKLSCSDIFLNELVMFTVGVVVITLP  
 FMCILVSYGYIGATILRVPSTKGIHKALSTCGSHLSVSVSLYYGSIFFGQYLFPTVSSSIDKDVIVALMYTV  
 VTPMLNPFYISLRNRDMKEALGKLF SRATFFSW

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_054107

**ORF Size:** 939 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\\_054107.1](#), [NP\\_473448.1](#)

**RefSeq Size:** 942 bp

**RefSeq ORF:** 942 bp

**Locus ID:** 26740

**UniProt ID:** [Q8NGS2](#)

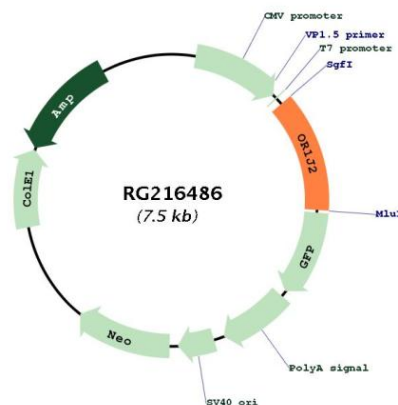
**Cytogenetics:** 9q33.2

**Protein Families:** Transmembrane

**Protein Pathways:** Olfactory transduction

**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 RG216486