

## Product datasheet for **RG222701**

### OR4S2 (NM\_001004059) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** OR4S2 (NM\_001004059) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** OR4S2  
**Synonyms:** OR4S2P; OR11-137; OST725  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG222701 representing NM\_001004059  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGAAAAAATAAACACGTAACGAATTCATTTCTGGGGTCTTTCTCAGAGCCCAGAGATTGAGAAAG  
 TTTGTTTTGTGGTGTTCCTTTCTTCTACATAATCATTCTTCTGGGAAATCTCCTCATCATGCTGACAGT  
 TTGCCTGAGCAACCTGTTAAGTCACCCATGATTTCTTCTCAGCTTCTGTCTTTGTGGACATTTGT  
 TACTCTTCAGTCACAGCTCCAAGATGATTGTTGACCTGTAGCAAAGGACAAAACCATCTCCTATGTGG  
 GGTGCATGTTGCAACTGCTTGGAGTACATTTCTTGGTTGCACTGAGATCTTCATCCTTACTGTAATGGC  
 CTATGATCGTTATGTGGCTATCTGTAAACCCCTACATTATATGACCATCATGAACCGGGAGACATGCAAT  
 AAAATGTTATTAGGGACGTGGGTAGGTGGTCTTACACTCCATTATCCAAGTGGCTCTGGTAGTCCAAC  
 TACCCTTTTGTGGACCCAATGAGATAGATCACTACTTTTGTGATGTTACCCTGTGTTGAAACTTGCCCTG  
 CACAGAAACATACATTGTTGGTGTGTTGTGACAGCCAACAGTGGTACCATTGCTCTGGGGAGTTTTGTT  
 ATCTTGCTAATCTCTACAGCATCATCTAGTTTCCCTGAGAAAGCAGTCAGCAGAAGGCAGGCGCAAAG  
 CCCTCTCCACCTGTGGCTCCCACATTGCCATGGTGGTATCTTTTTCGGCCCTGTACTTTTATGTACAT  
 GCGCCCTGATACGACCTTTTCAGAGGATAAGATGGTGGCTGTATTTTACACCATTATCACTCCCATGTTA  
 AATCCTCTGATTTATACACTGAGAAATGCAGAAGTAAAGAATGCAATGAAGAAACTGTGGGCAGAAATG  
 TTTTCTTGGAGGCTAAAGGGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG222701 representing NM\_001004059  
Red=Cloning site Green=Tags(s)

MEKINNVTEFIFWGLSQSPEIEKVCFVVFSSFFYIIILLGNLLIMLTVCLSNLFKSPMYFFLSFLSFVDIC  
 YSSVTAPKMIVDLLAKDKTISYVGCMLQLLGVHFFGCTEIFILVMAYDRYVAICKPLHYMTIMNRETCN  
 KMLLGTWVGGFLHSIIQVALVVQLPFCGPNEIDHYFCDVHPVLKLACTETIYIVGVVVTANSGTIALGSFV  
 ILLISYSIILVSLRKQSAEGRRKALSTCGSHIAMVVIFFGPCTFMYMRPDTTFSEDKMOVAVFYTIITPML  
 NPLIYTLRNAEVKNAMKKLWGRNVFLEAKGK

TRTRPLE - GFP Tag - V

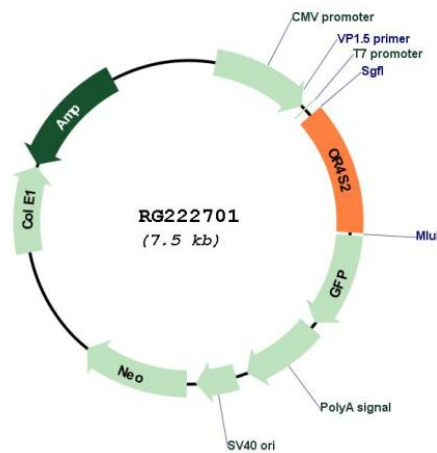
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_001004059

**ORF Size:** 933 bp

|                               |  |
|-------------------------------|--|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>   |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| <b>Components:</b>            | 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_001004059.1</a> , <a href="#">NP_001004059.1</a>  |
| <b>RefSeq Size:</b>           | 936 bp   |
| <b>RefSeq ORF:</b>            | 936 bp   |
| <b>Locus ID:</b>              | 219431   |
| <b>UniProt ID:</b>            | <a href="#">Q8NH73</a>   |
| <b>Cytogenetics:</b>          | 11q11  |
| <b>Protein Families:</b>      | Transmembrane  |
| <b>Protein Pathways:</b>      | Olfactory transduction   |
| <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] |