

## Product datasheet for **RG216940**

### **OR8K5 (NM\_001004058) Human Tagged ORF Clone**

#### Product data:

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Product Type:</b>             | Expression Plasmids     |
| <b>Tag:</b>                      | TurboGFP                |
| <b>Symbol:</b>                   | OR8K5                   |
| <b>Synonyms:</b>                 | OR11-174                |
| <b>Mammalian Cell Selection:</b> | Neomycin                |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010) |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)  |

**ORF Nucleotide Sequence:** >RG216940 representing NM\_001004058  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGCAACACAATCTAACAGTGCTAACTGAATTCATTCTGATGGAACCTCACAAGGCGGCCTGAGCTGC  
AGATTCCTCTTTTGGAGTCTTCCTCGTCATCTACCTAATCACAGTGGTGGCAACCTAACTATGATCAT  
TTTGACCAACTGGACTCCCACTTACATACACCTATGTACTTTCTATCAGACATTTGGCTTCTGTTGAT  
CTTGTAATTCTACTGTCATTTGTCCCAAGGTGCTGGCAAAATTTGTTGTGGATCGAAATACTATTTCT  
ATTATGCATGTGCTGCACAGCTGGCATTCTCCTTATGTTTATTATCAGTGAATTTTTCATCCTGTCAGC  
CATGGCCTATGACCGCTATGTGGCCATTTGTAACCTCTGCTCTATTATGTTATTATGTCTCAGCGACTG  
TGTCATGTACTGGTGGCATTCAATATCTCTACAGCACATTTAGGCTCTGATGTTCACTATTAAGATTT  
TTACATTGACCTTCTGTGGCTCTAATGTCATCAGTCATTTTACTGTGATGATGTTCTTTGCTACCTAT  
GCTTTGCTCAAATGCACAGGAAATAGAATTGTTGAGCATACTATTTCTGTATTTAATTTGATCTCCTCC  
TTTCTGATAGTCTTAGTGTCTACATGTTGATTTGTTAGCTATATGTCAAATGCATTCTGCAGAGGGCA  
GGAAAAAGGCTTTCTCCACATGTGGTTCCCATTTGACAGTGGTGGTGTGTTCTATGGGTCTCTACTCTT  
CATGTACATGCAGCCCAATTCACCTCACTTCTTTGATACTGATAAAATGGCTTCTGTGTTTACACTTTA  
GTAATCCCATGCTTAACCCCTTGATTACAGCTTAAGAAACGAAGAGGTGAAAAATGCCTTCTATAAGC  
TCTTTGAGAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >RG216940 representing NM\_001004058  
 Red=Cloning site Green=Tags(s)

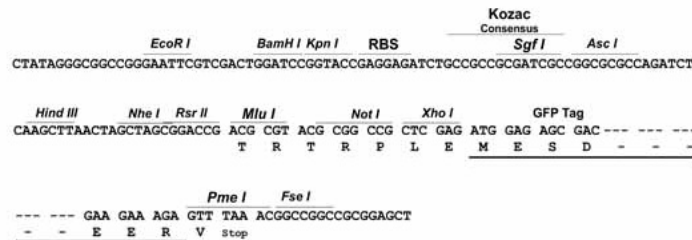
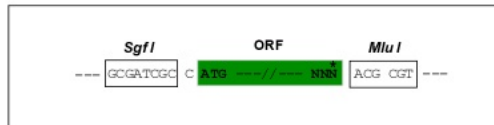
MGQHNLTVLTEFILMELTRPELQIPLFGVFLVIYLITVVGNLTMILTKLDSHLHTPMYFSIRHLASVD  
 LGNSTVICPKVLANFVDRNTISYYACAAQLAFFLMFIIEFFILSAMAYDRYVAICNPLLYVIMSQR  
 CHVLVGIQYLYSTFQALMFTIKIFTLTFCGSNVISHFYCDDVPLLPMLCSNAQEIELLSILFSVFNLISS  
 FLIVLVSYMLILLAICQMHSAGRKKAFASTCGSHLTVVVVFYGSLLFMYMQPNSTHFFDTDKMASVFYTL  
 VIPMLNPLIYSLRNEEVKNAFYKLFEN

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_001004058

**ORF Size:** 921 bp

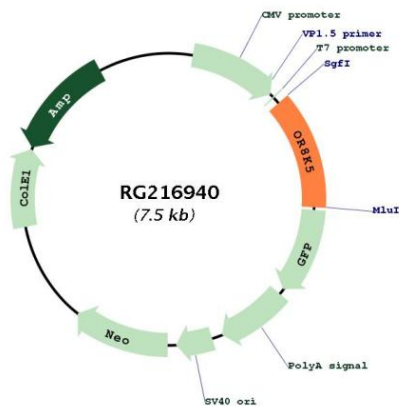
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RefSeq:</b>                | <u>NM_001004058.1</u> , <u>NP_001004058.1</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>RefSeq Size:</b>           | 924 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq ORF:</b>            | 924 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Locus ID:</b>              | 219453                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>UniProt ID:</b>            | <u>Q8NH50</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cytogenetics:</b>          | 11q12.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Protein Families:</b>      | Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protein Pathways:</b>      | Olfactory transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Summary:</b>          | <p>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]</p> |

Product images:



Circular map for RG216940