

Product datasheet for RC220021

OR4E2 (NM_001001912) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR4E2 (NM_001001912) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR4E2
Synonyms:	OR14-42
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220021 representing NM_001001912 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACAGTCTAAACCAACAAGAGTGACTGAATTTGTCTTCTTGGGACTCACTGATAACCGGTGCTGG
AAATGCTGTTTTTCATGGCATTCTCAGCCATTTATATGCTAACGCTTTCAGGGAACATTCTCATCATCAT
TGCCACAGTCTTTACTCCAAGTCTCCATACCCCATGTATTTCTCCTGAGCAATCTGCCTTTATTGAC
ATCTGCCACTCATCTGTCACTGTGCCTAAGATGTTGGAGGTTTGCTTTTAGAAAGAAAGACCATTTCT
TTGACAACTGCATCACACAGCTTCTTCTCTACATCTCTTGGCTGTGCCGAGATCTTTCTGCTGATCAT
TGTGGCGTATGATCGTTACGTGGCTATCTGCACTCCACTCCACTACCCCAATGTGATGAACATGAGAGTC
TGTATACAGCTTGTCTTTGCTCTCTGGTTGGGGGACTGTTCACTCACTAGGGCAGACCTTCTTACTA
TTCGTCTACCTTACTGTGGCCCCAACATTATTGACAGCTACTTCTGTGATGTGCCTTGTGTATCAAGCT
GGCCTGCACAGATACATACCTCACAGGAATACTGATTGTGACCAATAGTGAACCATCTCCCTCTCCTGT
TTCTTGGCCGTGGTCACCTCCTATATGGTCATCCTGGTTTCTTCTCGAAAACACTCAGCTGAAGGGCGCC
AGAAAGCCCTGTCTACCTGCTCGGCCACTTCAATGGTGGTTGCCCTTCTTTGGCCATGTATCTTCAT
CTATACTCGGCCAGACACCAGCTTCTCCATTGACAAGGTGGTGTCTGTCTTCTACACAGTGGTCACCCCT
TTGCTGAATCCCTCATTACACCTTGAGGAATGAGGAGTAAAAAGTCCATGAAGCAGCTCAGGCAGA
GACAAGTTTTTTTCACGAAATCATATACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220021 representing NM_001001912
Red=Cloning site Green=Tags(s)

MDSL NQTRVTEFVFLGLTDNRVLEMLFFMAFSAIYMLT LSGNILIIIATVFTPSLHTPMYFFLSNLSFID
 ICHSSVTVPKMLEGLLLERKTI SFDNCITQLFFLHLFACAEIFLLIIVAYDRYVAICTPLHYPNVMNMRV
 CIQLVFALWLG GTVHSLGQTF LIRLPYCGPNII DSYFCDVPLVIKLACTDTYL TGILIVTNSGTISLSC
 FLAVVTSY MVILVSLRKHSAEGRQKALSTCSAHFMVVALFFGPCIFIYTRPDTSF SIDKVVSVFYTVVTP
 LLNPF IYTLRNEEVKSAMKQLRQRQVFFTKSYT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8020_c07.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_001001912

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_001001912.1](#), [NP_001001912.1](#)

RefSeq Size: 942 bp

RefSeq ORF: 942 bp

Locus ID: 26686

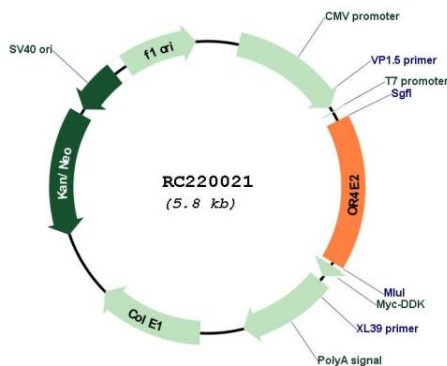
Cytogenetics: 14q11.2

Protein Pathways: Olfactory transduction

MW: 35.3 kDa

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 RC220021