

Product datasheet for RC222022

OR8I2 (NM_001003750) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR8I2 (NM_001003750) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR8I2
Synonyms:	OR11-170
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222022 representing NM_001003750 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGGCAACAATTTCACTGAGGTTACCGTCTTCATCCTCTCTGGATTGCAAATCACCTGAATTAC
AAGTCAGTCTTTTCTTGATGTTTCTCTTCATTTATCTATTCAGTGTGGGAAACCTGGGACTGATCAC
GTTAATCAGAATGGATTCTCAGCTTCACACCCCTATGTAATTTTCTGAGCAATTTAGCATTTATTGAC
ATATTTACTCCTCTACTGTAACACCTAAGGCATTGGTGAATTTCCAATCCAATCGGAGATCCATCTCCT
TTGTTGGCTGCTTTGTTCAAATGTACTTTTTGTTGGATTGGTGTGTTGTGAGTGTTCCTCTGGGATC
AATGGCCTACAATCGCTACATAGCAATCTGCAATCCCTTACTGTATTCAGTAGTCATGTCCAAAAAGTG
TCCAACCTGGCTGGGAGTAATGCCATATGTGATAGGCTTACAAGCTCGCTGATATCTGTCTGGGTGATAA
GCAGTTTGGCGTTCTGTGATTCCAGCATCAATCAATTTTTTTGTGACACCACAGCTCTTTTAGCACTCTC
CTGTGTAGATACATTCGGCACAGAAATGGTGAGCTTTGTCTTAGCTGGATTCACTCTTCTTAGCTCTCTC
CTTATCATCACAGTCACTTATATCATCATCTCAGCCATCCTGAGGATCCAGTCAGCAGCAGGCAGGC
AGAAGGCCTTCTCCACCTGCGCATCCACCTCATGGCTGTAATATCTTTTATGGTCTCTGATTTTAC
CTATTTGCAACCTGATAACACATCATCGCTGACCCAGGCGCAGGTGGCATCTGTATTCTATACGATTGTC
ATTCATGCTGAATCCACTCATCTACAGTCTGAGGAACAAAGATGTGAAAAATGCTCTTCTGAGAGTCA
TACATAGAAAACTTTTTCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222022 representing NM_001003750
Red=Cloning site Green=Tags(s)

MAGNNFTEVTVFILSGFANHPQLVSLFLMFLFIYLFVTLGNLGLITLIRMSQLHTPMYFFLSNLAFIG
 IFYSSTVTPKALVNFQSNRRSISFVGCFFVQMYFFVGLVCCECFLLGSMAYNRYIAICNPLLYSVVMSQKV
 SNWLGVMPPYVIGFTSSLISVWVVISSLAFCDSINHHFFCDTALLALSCVDTFGTEMVSVFLAGFTLLSSL
 LIITVTYIIIIISAILRIQSAAGRQKAFSTCASHLMAVTIFYGSLIFTYLQPDNTSSLTQAQVASVFYTIIV
 IPMLNPLIYSLRNKDKVKNALLRVIHRKLFV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8001_g04.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_001003750

ORF Size: 930 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_001003750.1](#), [NP_001003750.1](#)

RefSeq Size: 933 bp

RefSeq ORF: 933 bp

Locus ID: 120586

UniProt ID: [Q8N0Y5](#)

Cytogenetics: 11q12.1

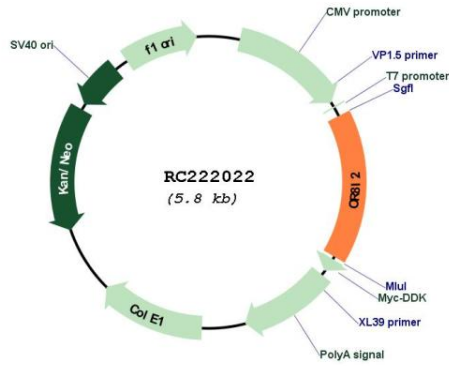
Protein Families: Transmembrane

Protein Pathways: Olfactory transduction

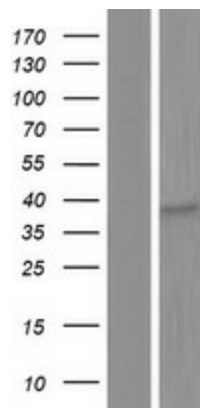
MW: 34.5 kDa

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 RC222022



Western blot validation of overexpression lysate (Cat# [LY423998]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222022 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).