

Product datasheet for RC222169

OR2T5 (NM_001004697) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR2T5 (NM_001004697) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR2T5
Synonyms:	OR1-62
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222169 representing NM_001004697 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAACATCACCAGGATGGCCAACCACACTGGAAAGTTGGATTTTCATCCTCATGGGACTCTTCAGAC
GATCCAAACATCCAGCTCTACTTAGTGTGGTCATCTTTGTGGTTTTCTGAAGGCGTTGTCTGAAATGC
TGTCTGATCCTTCTGATACACTGTGACGCCACCTCCACAGCCCATGTACTTTTTTCATCAGTCAATTG
TCTCTCATGGACATGGCGTACATTTCTGCACTGTGCCAAGATGCTCCTGGACCAGGTCATGGGTGTGA
ATAAGGTCTCAGCCCCTGAGTGTGGGATGCAGATGTTCCCTCTATCTGACACTAGCAGGTTCCGAATTTTT
CCTTCTAGCCACCATGGCCTATGACCGCTACGTGGCCATCTGCCATCCTCTCCGTTACCCGTCTCCTCATG
AACCATAGGGTCTGTCTTTTCTGGCATCGGGTCTGCTGGTTCTGGGCTCAGTGGATGGCTTCATGCTCA
CTCCCATCACCATGAGCTTCCCCTTCTGCAGATCCTGGGAGATTCATCATTTCTTCTGTGAAGTCCCTGC
TGTAACGATCCTGTCTGCTCAGACACCTCACTCTATGAGACCCTCATGTACCTATGCTGTGTCCTCATG
CTCCTCATCCCTGTGACGATCATTTCAAGCTCCTATTTACTCATCCTCCTCACCGTCCACAGGATGAACT
CAGCAGAGGGCCGAAAAAGGCCTTTGCCACCTGCTCCTCCACCTGACTGTGGTCATCCTCTTCTATGG
GGCTGCCGTCTACACCTACATGCTCCCCAGCTCCTACCACACCCCTGAGAAGGACATGATGGTATCTGTC
TTCTATACCATCCTCACTCCGGTCTGAACCCTTAACTATAGTCTTAGGAATAAGGATGTCATGGGG
CTCTGAAGAAAATGTAACTGTGAGATTCGTCCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222169 representing NM_001004697
Red=Cloning site Green=Tags(s)

MANITRMANHTGKLDFILMGLFRRSKHPALLSVVIFVVFLKALSGNAVLILLIHCD AHLHSPMYFFISQL
 SLMDMAYISVTVPKMLLDQVMGVNKVSAPECGMQMFLYLTLAGSEFFLLATMAYDRYVAICHPLRYPVLM
 NHRVCLFLASGCWFLGSVDGFMLTPITMSFPFCRSWEIHFFCEVPAVTILSCSDTSLYETLMLCCVLM
 LLIPVTIISSSYLLILLTVHRMNSAEGRKKAFATCSSHLTVVILFYGAAVYTYMLPSSYHTPEKDMMVSV
 FYTILTPVLNPLIYSLRNKDVMGALKKMLTVRFVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8002_e01.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_001004697

ORF Size: 945 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_001004697.2](#)

RefSeq Size: 948 bp

RefSeq ORF: 948 bp

Locus ID: 401993

UniProt ID: [Q6IEZ7](#)

Cytogenetics: 1q44

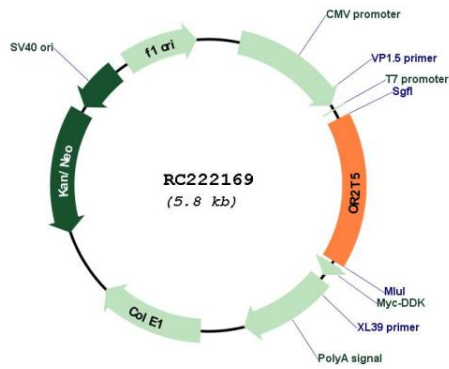
Protein Families: Transmembrane

Protein Pathways: Olfactory transduction

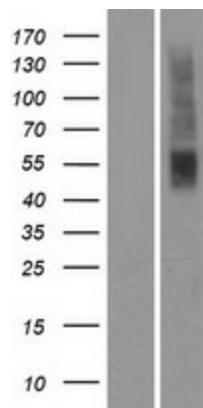
MW: 35.4 kDa

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 RC222169



Western blot validation of overexpression lysate (Cat# [LY423885]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222169 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).