

Product datasheet for RC221946

OR2A1 (NM_001005287) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OR2A1 (NM_001005287) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OR2A1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221946 representing NM_001005287 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGAAAAATCAGACAATGGTCACAGAGTTCCTCTACTGGGATTTCTCTGGGCCCAAGGATTCAGA
TGCTCCTCTTTGGGCTCTTCTCCCTGTTCTATATCTTCACCCTGCTGGGGAACGGGGCCATCCTGGGGCT
CATCTCACTGGACTCCAGACTCCACACCCCATGTAATCTTCTCTCACACCTGGCTGTCGTCGACATC
GCCTACACCCGCAACACGGTGCCCCAGATGCTGGCGAACCTCTGCATCCAGCCAAGCCCATCTCCTTTG
CTGGCTGCATGACGCAGACCTTTCTCTGTTTGAGTTTTGGACACAGCGAATGTCTCCTGCTGGTGTGAT
GTCTACGATCGTTACGTGGCCATCTGCCACCCTCTCCGATACTCCGTCATCATGACCTGGAGAGTCTGC
ATCACCTGGCCGTCACCTCCTGGACGTGTGGCTCCCTCCTGGCTCTGGCCCATGTGTTCTCATCTAA
GACTGCCCTTCTCTGGGCTCATGAAATCAACCACTTCTCTGTGAAATCCTGTCTGTCCTCAGGCTGGC
CTGTGCTGACACCTGGCTCAACCAGGTGGTATCTTTGCAGCCTGCGTGTCTTCTGGTGGGGCCACCC
AGCCTGGTGTCTCTCTACTCGCACATCCTGGCGCCATCCTGAGGATCCAGTCTGGGGAGGGCCGCA
GAAAGGCTTCTCCACCTGCTCCTCCACCTCTGCGTGGTGGGACTCTTCTTTGGCAGTGCCATCATCAT
GTACATGGCCCCAAGTCCCGCCATCCTGAGGAGCAGAAAAGGTCTTTTTTCTATTTTACAGTTTTTTC
AACCCAACACTTAACCCCTGATTTACAGCCTGAGGAACGGAGAGGTCAAGGGTGCCTGAGGAGAGCAC
TGGGCAAGGAAAGTCATTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221946 representing NM_001005287
Red=Cloning site Green=Tags(s)

MGENQTMVTEFLLLGFLLGPRIQMLLFGFLSFLFYIFTLLGNGAILGLISLDSRLHTPMYFFLSHLAVVDI
 AYTRNTVPQMLANLLHPAKPISFAGCMTQTFCLCSFGHSECLLLVMSYDRYVAICHPLRYSVIMTWRVC
 ITLAVTSWTCGSLALAHVVLILRLPFSGPHEINHFFCEILSVLRACADTWNQVVIFAACVFFLVGPP
 SLVLSYSHILAAILRIQSGEGRRKAFSTCSSHL CVVGLFFGSAIIMYMAPKSRHPPEEQKVFFLFYSFF
 NPTLNPLIYSLRNGEVK GALRRALGKESH S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8003_g03.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001005287

ORF Size: 930 bp

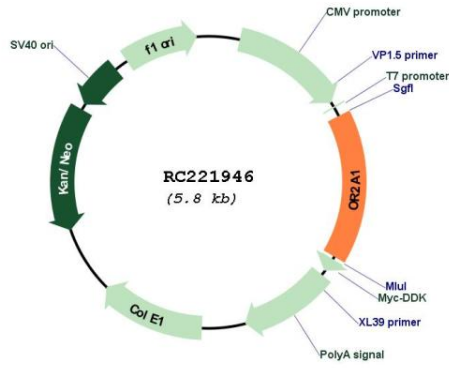
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_001005287.1 , NP_001005287.1
RefSeq Size:	933 bp
RefSeq ORF:	933 bp
Locus ID:	346528
UniProt ID:	Q8NGT9
Cytogenetics:	7q35
Protein Families:	GPCR, 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 RC221946