

Product datasheet for RC223604

Olfactory Receptor OR2A4 (OR2A4) (NM_030908) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Olfactory Receptor OR2A4 (OR2A4) (NM_030908) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Olfactory Receptor OR2A4
Synonyms:	OR2A10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223604 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGAGACAATATAACATCCATCAGAGAGTTCCTCTACTGGGATTTCCCGTTGGCCCAAGGATTCAGA
TGCTCCTCTTTGGGCTCTTCTCCCTGTTCTACGTCTTCACCCCTGCTGGGAACGGGACCATACTGGGGCT
CATCTCACTGGACTCCAGACTGCACGCCCCATGACTTCTTCTCTCACACCTGGCGTCTGACATC
GCCTACGCCTGCAACACGGTGCCCCGGATGCTGGTGAACCTCCTGCATCCAGCCAAGCCCATCTCCTTTG
CGGGCCGCATGATGCAGACCTTTCTGTTTTCCACTTTTGTCTCACAGAATGTCTCCTCCTGGTGGTGTAT
GTCTATGATCTGTACGTGGCCATCTGCCACCCCTCCGATATTTGGCCATCATGACCTGGAGAGTCTGC
ATCACCCCTCGCGGTGACTTCTGGACCCTGGAGTCTTTTATCCTTGATTTCATCTTGTGTTACTTCTAC
CTTTACCTTCTGTAGGCCCCAGAAAATTTATCACTTTTTTTGTGAAATCTTGGCTGTTCTCAAACCTTGC
CTGTGCAGATACCCACATCAATGAGAACATGGTCTTGGCCGGAGCAATTTCTGGGCTGGTGGGACCTTG
TCCACAATTGTAGTTTCATATGTGCATCCTCTGTGCTATCCTTCAGATCCAATCAAGGGAAGTTTCA
GGAAAGCCTTCCGCACCTGCTTCTCCACCTCTGTGTGATTGGACTCGTTTATGGCACAGCCATTATCAT
GTATGTTGGACCCAGATATGGGAACCCCAAGGAGCAGAAGAAATATCTCCTGCTGTTTACAGCCTCTTT
AATCCCATGCTCAATCCCCTTATCTGTAGTCTTAGGAACCTCAGAAGTGAAGAATACTTTGAAGAGAGTGC
TGGGAGTAGAAAGGGCTTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC223604 protein sequence
Red=Cloning site Green=Tags(s)

MGDNITSIREFLLLGFVGPRIQMLLFGLFSLFYVFTLLNGTILGLISLDSRLHAPMYFFLSHLAVVDI
 AYACNTVPRMLVNLLHPAKPISFAGRMMQTFLLFSTFAVTECLLLVMSYDLYVAICHPLRYLAIMTWVVC
 ITLAVTSWTTGVLLSLIHLVLLPLPFCRPQKIYHFFCEILAVLKLACADTHINENMVLAGAISGLVGPL
 STIVVSYMCILCAILQIQSREVQRKAFRTCFSHLCVIGLVYGTAIMYVGPVRYGNPKEQKKYLLLFHSLF
 NPMLNPLICSLRNSEVKNTLKRVLGVERAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6442_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_030908

ORF Size: 930 bp

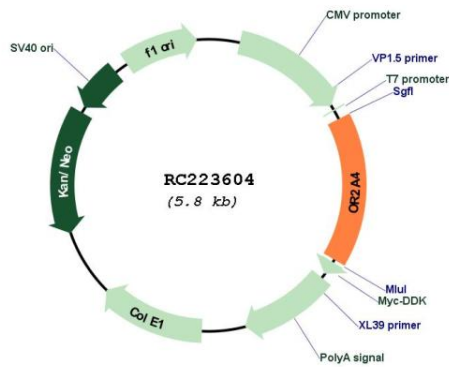
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

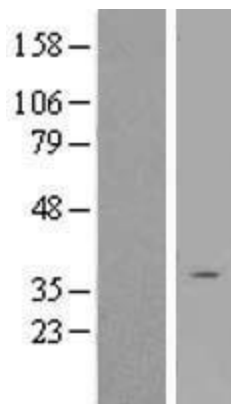
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_030908.2
RefSeq Size:	1758 bp
RefSeq ORF:	933 bp
Locus ID:	79541
UniProt ID:	O95047
Cytogenetics:	6q23.2
Domains:	7tm_1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Olfactory transduction
MW:	34.8 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 RC223604



Western blot validation of overexpression lysate (Cat# [LY410667]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223604 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).