

Product datasheet for **MR214068**

Olfr421-ps1 (NM_146720) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Olfr421-ps1
Synonyms:	MOR105-3; Olfr421; Olfr422-ps1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >MR214068 representing NM_146720
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAATGGAACCTATCTACCGTGACTGTGTTGTCTTCACTGGGTTCCCCAGCTCAAGAATGGTG
GCCTCCTGACTTTTTCTCTACTGTTTACATCTTTATTGTGACAGGAAACCTGATGATCTTTTT
TGCTGTAAGGTTGGACACTCGTCTTCATAATCCCATGTACAATTCATAAGTATCTTCTCATTCTTGAG
ATGTGGTATACAACAGCTACCATACCTAAGATGCTCTCCAATCTGATCAGTGAGCAAAGACCATTTCCT
TCATTGGCTGCCTCTTGACAGATGACTTCTCCATTCACTTGGAAATACCGAAGGGACCCTTCTGACTGT
CATGGCTATTGACAGGTATGTTGCCATCTGTAATCCACTCCGCTACCCAAACATCATGACACCCAGGCTC
TGTGCTCAGCTCACTGCTGGTCTTGTGTATTTGGCTTCTCATCCTTCTACCTGAGATTGTGTGGATT
CTACTCTACCTTTTGTGGCCCAATCAAATCACTCAGATATTCTGTGATTTACCCCTTTGTGAAGTT
AGCCTGTACAGATGCCTCAGTGATCTTGGTTCAAGATGTGATACATGCTCTCGCTATTCTGATCACAAAGT
CTGATTATTTCTTTCTTACATAAGAATTATTGTTGTTATCCTGAGCATCTTTCAACAGAAGGTGCGA
AAAAAGCTTTTCCACTTGCTGCTGCCACATTGCTGTCTTCTCTGTTTTTGGCAGTGTGGCCCTTAT
GTATCTTCGATTCTGCCACCTATACACCATCTGGGACAACACCATGCTCTTACATTTCTGTGTTT
GCCCTCTTTTCAATCCTATTATATACAGCCTGAGAAATAAGGACATGAAAGATGCAATTAACAACTCA
TTTGTACTCAAAAAGTATCCAATGAATCATATAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGTTTAA



Protein Sequence:

```
>MR214068 representing NM_146720
```

Red=Cloning site Green=Tags(s)

MENGNLSTVTVFVFTGFPQLKNGLLYFFPLLFIYIFIVTGNLMIFFAVRLDTRLHNPMYNFISISFSLF
MWTATATIPKMLSNLISEQKTSIFIGCLLQMYFFHSLGNTGTLTVMAIDRYVAICNPLRYPNIMTPRL
CAQLTAGSCVFGFLILLPEIYVWISTLPFCGPNQITQIFCDFPLKLACTDASVILVQDVTHALAILITS
LIISLSYIRIIIVVLSISTTEGRKKAFFCSAAHIVFLFSGVALMYLRFSATYTPFWDNTIAITFSVF
APLFNPIIYLSRNKMDKDAINKICTOKVSNESHV

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Chromatograms:

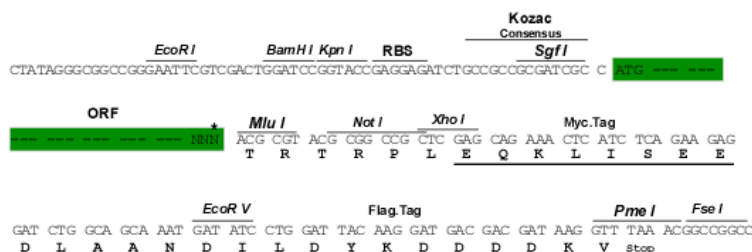
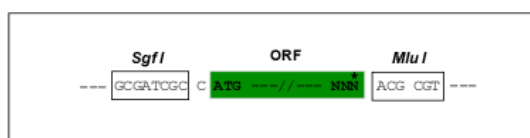
https://cdn.origene.com/chromatograms/mm9068_f05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:

NM_146720

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:

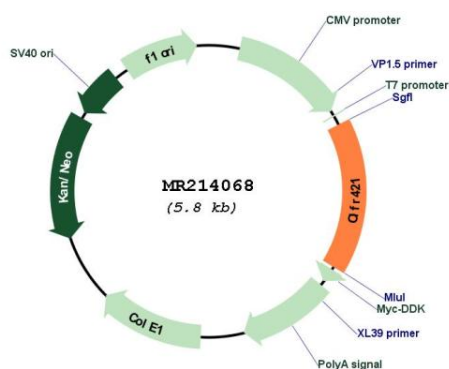
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_146720.3, NP_666931.3</u>
RefSeq Size:	1050 bp
RefSeq ORF:	948 bp
Locus ID:	258715
Cytogenetics:	1 H3
MW:	35.6 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. This olfactory receptor gene appears to represent a strain-specific polymorphic pseudogene in mouse, where some strains, including the C57BL/6 reference genome strain, have a non-functional allele, while other strains have a protein-coding allele. [provided by RefSeq, Apr 2012]

Product images:



Circular map for MR214068