

Product datasheet for RC213291

TAS2R49 (TAS2R20) (NM_176889) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TAS2R49 (TAS2R20) (NM_176889) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAS2R49
Synonyms:	T2R20; T2R49; T2R56; TAS2R49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213291 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGAGTTTTCTACACATTGTTTTTCCATTCTAGTAGTGGTGCATTTATTCTTGAAATTTTGCCA
ATGGCTTTATAGCACTGATAAATTTTCATTGCCTGGGTCAAGAGACAAAAGATCTCCTCAGCTGATCAAAT
TATTGCTGCTCTGGCAGTCTCCAGAGTTGGTTTGGCTCTGGGTAATATTATTACATTGGTATTCAACTGTG
TTGAATCCAACCTCATCTAATTTAAAAGTAATAATTTTTATTTCTAATGCCTGGGCAGTAACCAATCATT
TCAGCATCTGGCTTGCTACTAGCCTCAGCATATTTTATTTGCTCAAGATCGTCAATTTCTCCAGACTTAT
TTTTCATCACTTAAAAAGGAAGGCTAAGAGTGTAGTTCGGTGATAGTGTGGGGCTTTGTTCTTTTTG
GTTTGTCACTTGTGATGAAACACACGTATATAATGTGTGGACAGAAGAATGTGAAGGAAACGTAACCT
GGAAGATCAAACCTGAGGAATGCAATGCACCTTTCCAACCTGACTGTAGCCATGCTAGCAAACCTTGATACC
ATTCACCTGACCCCTGATATCTTTTCTGCTGTTAATCTACTCTCTGTGTAACATCTGAAGAAGATGCAG
CTCCATGGCAAAGGATCTCAAGATCCCAGCACCAAGATCCACATAAAAAGCTCTGCAAACCTGTGACCTCCT
TCCTCATATTACTTGCCATTTACTTTCTGTGTCTAATCATATCGTTTTGGAATTTAAGATGCGACCAAA
AGAAATGTCTTAATGCTTTGCCAAGCTTTTGGAAATCATATATCCATCATTCCACTCATTCTGATT
TGGGGGAACAAGACGCTAAAGCAGACCTTCTTTCAGTTTTGTGGCAGGTGACTTGCTGGCAAAAAGGAC
AGAACCAGTCAACTCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC213291 protein sequence
Red=Cloning site Green=Tags(s)

MMSFLHIVFSILVVVAFILGNFANGFIALINFIWVKRQKISSADQIIAALAVSRVGLLWVILLHWYSTV
 LNPTSSNLKVIIFISNAWAVTNHFSIWLATSLSIFYLLKIVNFSRLIFHHLKRRKAKSVVLVIVLGSLLFFL
 VCHLVMKHTYINWTEECEGNVTWKIKLRNAMHLSNLTVAMLANLIPFTLTLISFLLLIYSLCKHLKMKMQ
 LHGKGSQDPSTKIHIKALQTVTSFLILLAIYFLCLIIISFWNFKMRPKEIVMLCQAFGIIYPSFHSFILI
 WGNKTLKQTFLSVLWQVTCWAKGQNQSTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6449_g08.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_176889

ORF Size: 927 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_176889.3](#), [NP_795370.2](#)

RefSeq Size: 1914 bp

RefSeq ORF: 930 bp

Locus ID: 259295

UniProt ID: [P59543](#)

Cytogenetics: 12p13.2

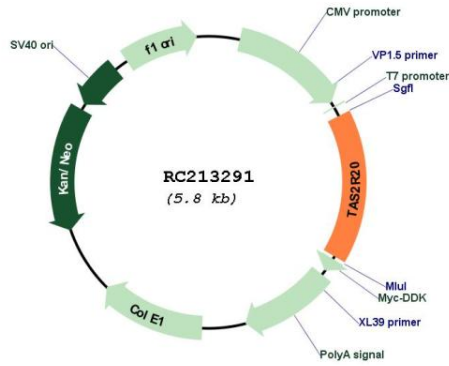
Protein Families: Transmembrane

Protein Pathways: Taste transduction

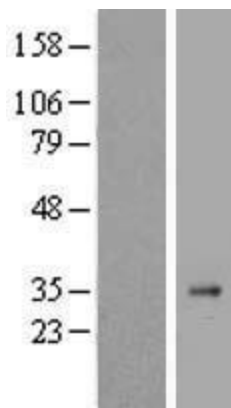
MW: 35.4 kDa

Gene Summary: This gene encodes a member of the taste receptor two family of class C G-protein coupled receptors. Receptors of this family have a short extracellular N-terminus, seven transmembrane helices, three extracellular loops and three intracellular loops, and an intracellular C-terminus. Members of this family are expressed in a subset of taste receptor cells, where they function in bitter taste reception, as well as in non-gustatory cells including those of the brain, reproductive organs, respiratory system, and gastrointestinal system. This gene maps to the taste receptor gene cluster on chromosome 12p13. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RC213291



Western blot validation of overexpression lysate (Cat# [LY406143]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213291 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).