

## Product datasheet for **RC223842**

### TAS2R44 (TAS2R31) (NM\_176885) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TAS2R44 (TAS2R31) (NM_176885) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TAS2R44
Synonyms:	T2R31; T2R44; T2R53; TAS2R44
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223842 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACAAC~~TTTTATACCCATCATTTTTTCCAGTGTGGTAGTGGTCTATTTGTTATTGGAAATTTTGCTA~~  
ATGGCTTCATAGCATTGGTAAATTCATTGAGCGGGTCAAGAGACAAAAGATCTCTTTTGGTACCAGAT  
TCTCACTGCTCTGGCGGTCTCCAGAGTTGGTTTGGCTCTGGGTATTATTATAAATTGGTATTCAACTGTG  
TTAATCCAGCTTTTTATAGTGTAGAAGTAAGAAGTACTGCTTATAATGTCTGGGCAGTAACCGGCCATT  
TCAGCAACTGGCTTGCTACTAGCCTCAGCATATTTTATTTGCTCAAGATTGCCAATTTCTCCAACCTTAT  
TTTTCTCACTTAAAGAGGAGAGTTAAGAGTGTCACTTCTGGTGTGCTGTTGGGGCTTTACTATTTTTG  
GCTTGTCAACTTTTTGTGATAAACATGAAAGAGATTGTACGGACAAAAGAATATGAAGGAAACTTGACTT  
GGAAGATCAAATGAGGAGTGCAGTGTACCTTTTCCAGATGCGACTGTAACCACGCTAGGAAACTTAGTGCC  
CTTCACTCTGACCCTGCTATGTTTTTGGCTGTTAATCTGTTCTCTGTGTAACATCTCAAGAAGATGCAG  
CTCCATGGTAAAGGATCTCAAGATCCCAGCACCAAGGTCCACATAAAAAGCTTTGCAAACCTGTGATCTTT  
TCCTCTTGTTATGTGCCGTTTACTTTCTGTCCATAATGATATCAGTTTGGAGTTTGGGAGTCTGGAAAA  
CAAACCTGTCTTCATGTTCTGCAAAGCTATTAGATTGAGTATCCTTCAATCCACCCATTCATCCTGATT  
TGGGGAACAAGAAGCTAAAGCAGACTTTTCTTTCAGTTTGGCGCAAGTGGGACTGGGTGAAAGGAG  
AGAAGCCTTCATCTCCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC223842 protein sequence  
Red=Cloning site Green=Tags(s)

MTTFIPIIFSSVVVLFVIGNFANGFIALVNSIERVKRQKISFADQILTALAVSRVGLLWVLLLNWYSTV  
 FNPAFYSEVVRTTAYNVWAVTGHFSNWLATSLSIFYLLKIANFSNLIFLHLKRRVKSIVILVMLLGPLLFL  
 ACQLFVINMKEIVRTKEYEENLTKWIKILRSAYVLSDATVTTLGNLVPFTLTLLCFLLLICSLCKHLKMQ  
 LHGKGSQDPSTKVHIKALQTVIFFLLLCAYVFLSIMISVWSFGSLENKPVFMFCKAIRFSYPSIHPFILI  
 WGNKLLKQTFLSVLRQVRYWVKGEKPSSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6464\\_a04.zip](https://cdn.origene.com/chromatograms/mk6464_a04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_176885

**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\\_176885.2](#)

**RefSeq Size:** 1021 bp

**RefSeq ORF:** 930 bp

**Locus ID:** 259290

**UniProt ID:** [P59538](#)

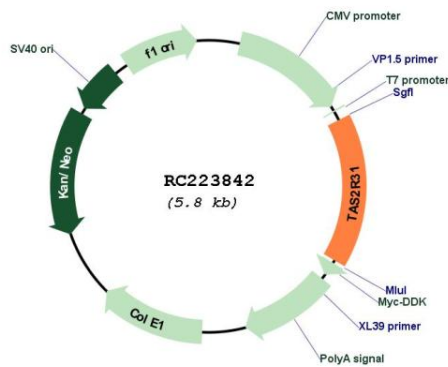
**Cytogenetics:** 12p13.2

**Protein Pathways:** Taste transduction

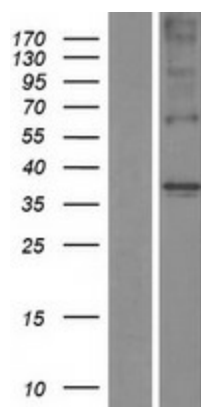
**MW:** 35.3 kDa

**Gene Summary:** TAS2R44 belongs to the large TAS2R receptor family. TAS2Rs are expressed on the surface of taste receptor cells and mediate the perception of bitterness through a G protein-coupled second messenger pathway (Conte et al., 2002 [PubMed 12584440]). For further information on TAS2Rs, see MIM 604791.[supplied by OMIM, Mar 2009]

**Product images:**



Circular map for RC223842



Western blot validation of overexpression lysate (Cat# [LY406139]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223842 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).