

Product datasheet for **RC204543**

RTP4 (NM_022147) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RTP4 (NM_022147) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RTP4
Synonyms: IFRG28; Z3CXXC4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204543 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTTGTAGATTTCTGGACTTGGGAGCAGACATTTCAAGAACTAATCCAAGAGGCAAACCCGGGCCA
 CATGGACGCTGAAGTTGGATGGCAACCTTCAGCTAGACTGCCTGGCTCAAGGGTGAAGCAATACCAACA
 GAGAGCATTTGGCTGGTCCGGTGTTCCTGCCAGCGAAGTTGGGCTCCGCCAAGTGCAGATTCTG
 TGCCACACGTAAGGACTGGACATCCAGGGTCAGGTGCGTATGAGGCTCTTGGCCAAAGGTGCC
 AGAAGTGCTCCTGGTCCCAATATGAGATGCCTGAGTTCTCCTCGGATAGCACCATGAGGATTCTGAGCAA
 CCTGGTGCAGCATATACTGAAGAAATACTATGGAATGGCATGAGGAAGTCTCCAGAAATGCCAGTAATC
 CTGGAAGTGTCCTGGAAGGATCCCATGACACAGCCAATTGTGAGGCATGCACTTTGGGCATATGTGGAC
 AGGGCTTAAAAAGCTACATGACAAAGCCGTCCAAATCCCTACTCCCCACCTAAAGACTGGGAATTCCTC
 ACCTGGAATTGGTGTGTACCTCGCAAACCAAGCCAAGAACCAGTCAGATGAGGCAAAAGAGGCTAAG
 GGGAGTGGGTATGAGAAATTAGGGCCAGTCGAGACCCAGATCCACTGAACATCTGTGTCTTTATTTTGC
 TGCTTGATTTATTGTAGTCAAATGCTTTACATCAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204543 protein sequence
 Red=Cloning site Green=Tags(s)

MVVDFTWEQTFQELIQEAKPRATWTLKLDGNLQLDCLAQGWKQYQQRAFGWFRCSQCQRSWASQVQIL
 CHTYWEHWTSQGGVQRMRLFGQRCQKCSWSQYEMPEFSSDSTMRIILSNLVQHILKKYYGNGMRKSPEMPVI
 LEVSLGSHDTANCEACTLGICGQGLKSYMTPKPSKLLPHLKTGNSSPGIGAVYLANQAKNQSDAEAK
 GSGYEKLGPSRDPDLNICVFIILLVFIIVKCFITSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6012_b10.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_022147

ORF Size: 738 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: [NM_022147.3](#)

RefSeq Size: 1027 bp

RefSeq ORF: 741 bp

Locus ID: 64108

UniProt ID: [Q96DX8](#)

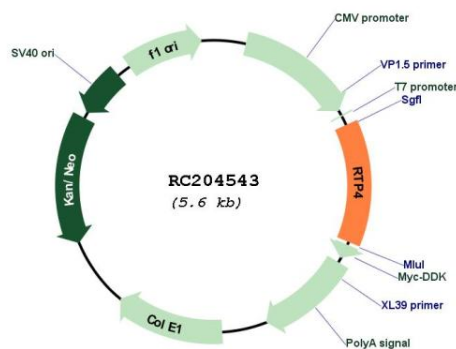
Cytogenetics: 3q27.3

Protein Families: Druggable Genome

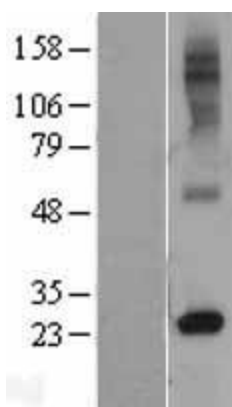
MW: 28 kDa

Gene Summary: Probable chaperone protein which facilitates trafficking and functional cell surface expression of some G-protein coupled receptors (GPCRs). Promotes functional expression of the bitter taste receptor TAS2R16 (PubMed:16720576). Also promotes functional expression of the opioid receptor heterodimer OPRD1-OPRM1 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC204543



Western blot validation of overexpression lysate (Cat# [LY402913]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204543 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).