

## Product datasheet for **MR218998**

### **Rtp4 (NM\_023386) Mouse Tagged ORF Clone**

#### Product data:

|                    |                        |
|--------------------|------------------------|
| Product Type:      | Expression Plasmids    |
| Tag:               | Myc-DDK                |
| Symbol:            | Rtp4                   |
| Synonyms:          | 5830458K16Rik; Ifrg28  |
| Mammalian Cell     | Neomycin               |
| Selection:         |                        |
| Vector:            | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL)   |

**ORF Nucleotide Sequence:** >MR218998 representing NM\_023386  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGCTGTTCCCGATGACTTCAGTACTTGGGAGCAGACATTTCAAGAACTGATGCAGGAGGAGAAGCCCC  
GGGCCAAGTGGAGCCTGCATTTGGATAAGAACATTGTACCAGATGGTGCAGCCCTGGGATGGAGGCAGCA  
CCAGCAGACAGTGTGGCAGGTTCCAGTGTCCAGATGCTGCAGAAGTTGGACCTCTGCTCAGGTGATG  
ATCTTGTGCCACATGTACCCGGACACTTTGAAATCGCAGGGCCAGGCACGCATGAGGATCTTTGGTCAGA  
AGTGCCAGAAGTGTGGATGTCAATTTGAGACTCCCAAGTTCTCCACAGAGATCATCAAAGAATTCT  
GAATAACCTAGTTAATTATATTCTGCAGAGATACTATGGACACAGGAAGATAGCATTGACCTCGAATGCA  
TCTTTGGGTGAGAAGGTGACTTTGGATGGGCCCCACGACACACGCAATTGTGAGGCATGCAGTCTAACT  
CTCATGGAAGATGTGCCCTTGACACAAAGTAAACCACCCAGATCTCCATCTCCATTACCAAAGAGTTC  
CTCCCCATCAAAGAGCTGCCCTCCTCCGCCTCAGACCCGGAATACGGATTTTGGGAATAAACTTTTCAG  
GATTTTGGGAATAGAACTTTTCAGGGATGCAGAGAGCCCCCAACGTGAAATAGAGCCACCACTATTTTC  
TGTTTTGTCTATTGCTGCATTTGCCCTTTTAGTCTTTTCACTAGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence:

>MR218998 representing NM\_023386

Red=Cloning site Green=Tags(s)

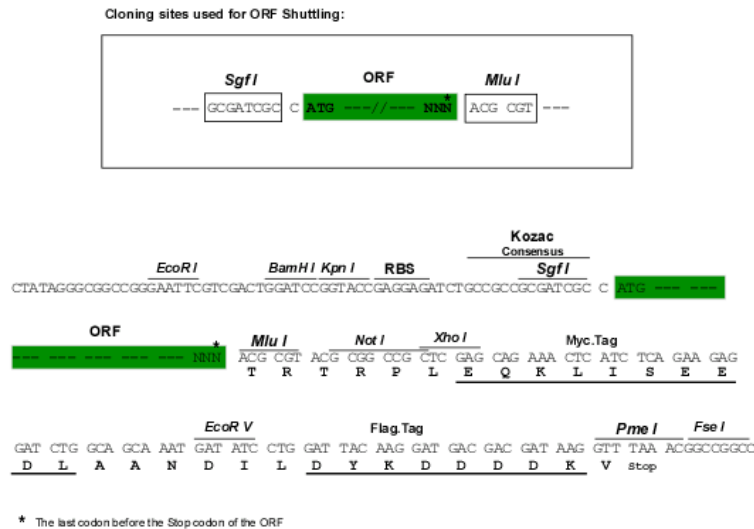
MLFPDDFSTWEQTFQELMQEEKPGAKWSLHLDKNIVPDGAALGWRQHQQTVLGRFQCSRCCRSWTSQVM  
ILCHMYPDTLKSQQAARMRIFGQKQKCFGCQFETPKFSTEIKRILNVLNYILQRYYGHRKIALTSNA  
SLGEKVTLDGPHDTRNCEACSLNSHGRCALAHKVKPPRSPSPLPKSSSPSKCPPPPQTRNTDFGNKTFQ  
DFGNRTFQGCREPPQREIEPPLFLFLSIAAFALFSLFTR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM\_023386

ORF Size:

747 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:

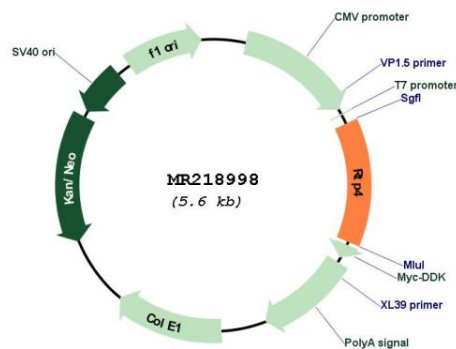
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol> |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq:</b>                | <u>NM_023386.5</u> , <u>NP_075875.3</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>RefSeq Size:</b>           | 1573 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>RefSeq ORF:</b>            | 750 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Locus ID:</b>              | 67775                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>UniProt ID:</b>            | <u>Q9ER80</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cytogenetics:</b>          | 16 B1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>MW:</b>                    | 28.8 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Summary:</b>          | 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 (By similarity). Also promotes functional expression of the opioid receptor heterodimer OPRD1-OPRM1 (PubMed:18836069).[UniProtKB/Swiss-Prot Function]                                                                                                                                                  |

**Product images:**



Circular map for MR218998