

## Product datasheet for **MR216988**

### Otop2 (NM\_172801) Mouse Tagged ORF Clone

#### Product data:

|                           |                        |
|---------------------------|------------------------|
| Product Type:             | Expression Plasmids    |
| Tag:                      | Myc-DDK                |
| Symbol:                   | Otop2                  |
| Synonyms:                 | 4732464P15             |
| Mammalian Cell Selection: | Neomycin               |
| Vector:                   | pCMV6-Entry (PS100001) |
| E. coli Selection:        | Kanamycin (25 ug/mL)   |



**ORF Nucleotide Sequence:** >MR216988 representing NM\_172801  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGTCGGAGGAACCTGGTCCCGCATCCCAATGAGAGCCTGCCGGGGCCTCGGGCCAGCCCCCGTGAGGTGT  
 GGAAAAAGGGCGGCCCGCTGCTGTCGGTGTCTTGGCTGTCAACGTGCTGCTGCTCGCTGCACGCTCAT  
 CAGCGCGGTGCCTTCAACAAGGTGGCGGTGTATGACACGGACGTGTTGCTCTGCTCACCACCATGATG  
 CTGTCGGCGCGCTATGGATAGTCTTCTACCTCCTCCGACCGCTCGTGTCCAGACGCGGTGCCTTACC  
 GGGATGCTCATGCTGGTCCCATCTGGCTCCGAGGTGGGCTGGTGTGTTTGGAACTGACACCTTGTCTAT  
 GGATGTCTTCAAGACTGGCTACTATTCCAGTTTCTTTGAGTGCCAGTCCGCCATCAAGATCCTGCACCCC  
 ATCATCCAAGCGTGTGTGTCATTGTCCAGACTTACTTTCTCTGGATCTCCGCTAAAGACTGTATCCATA  
 CCCACCTGGACCTGACCCGGTGTGGGCTCATGTTACCCCTCGCCACCAACCTCGCCATCTGGATGGCAGC  
 CGTAGTGGATGAGTCCGTGCACCGGCCACTCCTACAGTGGTTCCTATGGCAACACCGCCACACCCGC  
 CTCACCCCTGACTCAAAGCGTGCAGGAGGTGCAGCTGAAGAAGACCCGTGCCTCTGCAGCACAGCCATCT  
 GTCAGATCTTCCAGCAAGGCTATTTCTACCTGTATCCCTTCAACATCGAGTACAGCCTCTTTGCTTCCAC  
 CATGCTGTATGTATGTGAAGAATGTGGGAAGGCTGCTCGCTCCACCCACGGCCACGGCCACACACCG  
 TCCAGGTGACGCTGTTCCGGGAGACCTTCTTTGCCGGCCAGTCTTGGCCTGCTCCTCTTTGTGGTGG  
 GGTTGGCTGTCTTATCCTTTATGAGGTCCAGGTGAGTGGAGAGAGAGGCCACACCCGACAGGCCCTGGT  
 CATCTACTACAGCTTAAACATTGTCTGTCTGGGCTCATGACTCTGGTCAGCCTGAGTGGTTCAGTCATC  
 TATCGTTTTGACCGTCGGGCCATGGACCATATAAGAACCCGACACGGACCTGGATGTGGCCCTGCTAA  
 TGGGCGCCGCCCTGGGCAATACGCTATCTCTACTACTCTATCGTGGCTGTGGTGGTGGCTCTCCAG  
 AGACCTGCAGGGGGCGCTCAACCTGTCCACGCTCTACTCATGATCGCTCAGCACACCTTCCAGAATGTC  
 TTCATCATTGAGAGCCTCCATCGGGGACCTCCTGGGGCTGAGCCTCGTGAATGCCCCCAAGGAGCCCT  
 GCCAAGGCATCACCTTTGCTAACCTGGATGCTATCCGACCTTGCTTCTGTCCACCCACCCCAAGGCT  
 GGTCAATCCCAACCTAGAAAGTCTCAGGAAGCAGTGGCTATCATCTCGGCCCCAGGTGCCACTGGCGA  
 CGTCGGTGCCTGAAAGACATCTCTGTTTCTCTGCTCTGTAACGTCATCCTGTGGATCATGCCTGCCT  
 TTGGCGCTCGCCGCACTTCAAGCAATACCGTGGAGGTGGACTTTTACGGTTACTCCCTCTGGGCGCCAT  
 CGTCAACATCTGCCTACCTTTGGCATCTCTACCGAATGCACGCTGTCTCCAGTCTACTGGAGGTCTAT  
 GTACTGTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR216988 representing NM\_172801  
 Red=Cloning site Green=Tags(s)

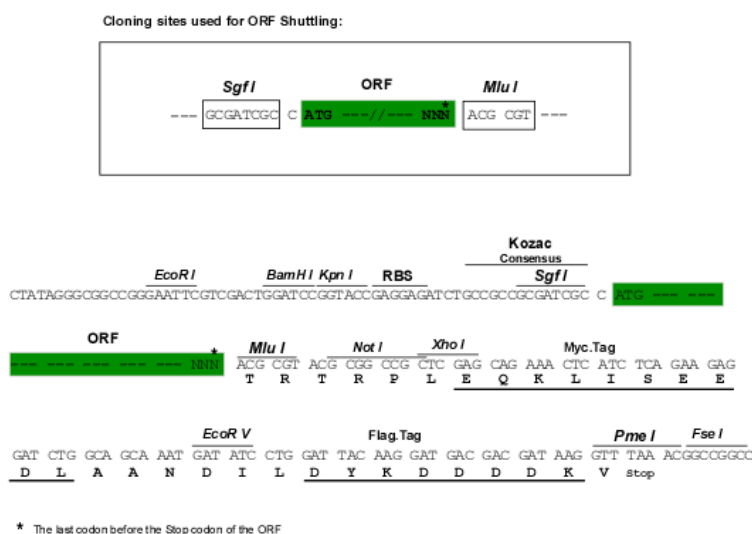
MSEELVPHPNESLPGPRASPREVWKKGGRLSVLLAVNVLLLAETLISGGAFNKVAVYDQVDFALLTMM  
 LLAALWIVFYLLRTARCPDAVPYRDAHAGPIWLRGGLVLFICTLVMDVFKTGYSSFFECQSAIKILHP  
 IIQAVFVIVQTYFLWISAKDCIHTLDLTRCGLMFTLATNLAIWMAAVVDESQVHQAHSYSGSHGNTSHTR  
 LNPDSKRAGGAAEEDPCLCSTAIQIFQQGYFYLFPFNI EYSLFASTMLYVMWKNVGRLLASTHGHGHTP  
 SRVSLFRETFAGPVLGLLLFVVGAVFILYEVQVSGERGHTRQALVIYYSFNIVCLGLMTLVSLSGSVI  
 YRFDRRAMDHHKNPTRLDAALLMGAALGQYAISSYISIVAVVVGSPRDLQALNL SHALLMIAQHTFQNV  
 FIIESLHRGPPGAEPREMPPEPCQGITFANLDAIRTLPSCPPTPRLVIPNLESPQEAIVAIISAPRCHWR  
 RRCLKDISLFLLLCNVILWIMPAFGARPHFSNTVEVDVFGYSLWAAIVNICLPFGIFYRMHAVSSLLEVY  
 VLS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9015\\_b12.zip](https://cdn.origene.com/chromatograms/mm9015_b12.zip)

**Restriction Sites:** SgfI-MluI

### Cloning Scheme:



ACCN: NM\_172801

**ORF Size:** 1689 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 0.22µm filter is required.

**RefSeq:** NM\_172801.2, NP\_766389.2

**RefSeq Size:** 2350 bp

RefSeq ORF: 1692 bp

Locus ID: 237987

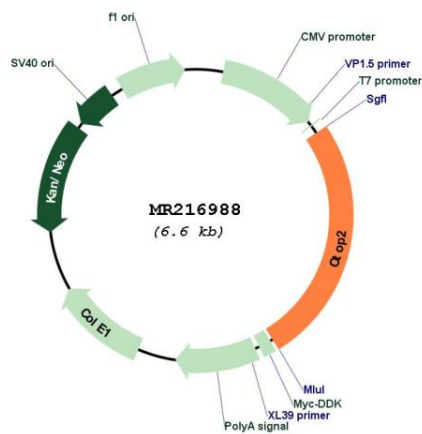
UniProt ID: [Q80SX5](#)

Cytogenetics: 11 E2

MW: 63 kDa

**Gene Summary:** Proton-selective channel that specifically transports protons into cells. Proton-selective channel activity is probably required in cell types that use changes in intracellular pH for cell signaling or to regulate biochemical or developmental processes.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR216988