

Product datasheet for **RC216687**

OTOP2 (NM_178160) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OTOP2 (NM_178160) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OTOP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216687 representing NM_178160
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGAGGAGCTGGCCAGGGCCCAAGGAGAGCCCCCGCGCCCGCTGCGGGCCCCAGGGAGGTGT
 GGAAGAAGGGTGGCCGCTGCTGTCGGTCTGCTGGCGGTGAACGTGCTGCTCCTCGCCTGCACGCTCAT
 CAGCGGGGAGCCTTCAACAAGGTGGCCGTGTACGACACCGACGTGTTTCGCGCTGCTCACTGCGATGATG
 CTGCTGGCAACGCTCTGGATCCTTCTACCTCCTCCGAACCGTGCCTGCCCTGCGCGGTACCTACC
 GGGACGCGCACGCTGGCCCATCTGGCTCCGAGGTGGGCTGGTGTGTTTGAATCTGCACCCTCATCAT
 GGATGTCTTCAAGACCGGCTACTACTCCAGTTTCTTTGAGTGCCAGTCAGCCATCAAGATCTGCACCCC
 CTCATCCAGGCTGTGTTTGCATCATCCAGACCTACTTCTCTGGGTCTCTGCTAAAGACTGCGTTCACG
 TCCACCTGGATCTGACCTGGTGTGGTCTCATGTTCACTACCACCAACCTGGCCATCTGGATGGCGGC
 CGTGGTGGATGAATCTGTGCACCAATCCCCTCCTACAGCAGTTCTCACAGCAACGCCAGCCAGCCCGT
 CTATCTCTGACCAGCATGCAGACAACCCGGTCCGAGGAGACTCCTGCCTCTGCAGCACGGCCGTCTGCC
 AGATCTTCCAGCAGGGGACTTCTACCTATATCCCTTCAACATCGAGTACAGCCTCTTCGCTCCACCAT
 GCTGTATGTATGTGGAAGAATGTGGTAGATTCTGGCCTCCACCCCTGGCCACAGCCACACCCCAACC
 CCTGTCAGCCTCTTCCGGGAGACCTTTTTTGTGGCCCGGTTCTGGGCTGCTGCTTTCGTGGTGGGGC
 TGGCTGTCTTATCATCTACGAGGTTCAAGTGAGCGGGGACGGGAGCCGACCAGGCAGGCCCTGGTTCAT
 CTACTACAGCTTCAACATTGTCTGCTGGGACTCACCCTTGGTTCAGCCTGAGCGGCTCCATCATCTAC
 CGTTTTGACCGCCGGGCCATGGACCACCATAAGAACCCACGCGCACTCTGGACGTGGCCCTGCTGATGG
 GTGCCCGCCTGGGTGAGTACGCCATCTTACTACTCCATCGTGGCTGTGGTGGCGGGCACACCCAGGA
 CCTGCTGGCAGGGCTCAACCTCACCCATGCATGCTCATGATCGCCAGCACACCTTCCAGAACATGTTT
 ATCATCGAGAGCCTTACCGAGGACCGCCGGGCTGAGCCTCACAGTACCCACCCCAAGGAGCCCTGCC
 AAGACCTCACCTTACCAACCTGGATGCCTCCACACGTTGTCCGCTGCCACCCCAACCCCGGGTGGT
 TAGCCCCAGCCCTCAGACCAGCGGAAGCAGTGGCCATCGTCTCAACCCCAAGAAGCCAGTGGAGACGC
 CAGTGCCTAAAAGACATTTCTGTTTCTCTACTCTGCAATGTCATTCTGTGGATCATGCCTGCCTTCG
 GGGCCCGCCTCATTTAGCAACACAGTGGAGGTGGATTTCTACGGCTACTCCCTCTGGCGGTATCGT
 CAACATCTGCCTCCCTTCGGCATCTTCTACCGCATGCACGCTGTGTCCAGCCTGCTGGAGTCTACGTG
 CTGTCC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216687 representing NM_178160
 Red=Cloning site Green=Tags(s)

MSEELAQGPKEPPAPRAGPREVWKKGGRLLSVLLAVNVLLLAETLISGGAFNKVAVYDQVDFALLTAMM
 LLATLWILFYLLRTRVRCPCAVPYRDAHAGPIWLRGGLVLFGICTLIMDVFKTGYYSSFFECQSAIKILHP
 LIQAVFVLIQTYFLWVSADKCVHVLDTWCGLMFTLTNLAIWMAAVVDESVDHQSISYSSSHSNASHAR
 LISDQHADNPVGGDSCLCSTAVCQIFQQGYFYLYPFNIEYSLFASTMLYVMWKNVGRFLASTPGHSHTPT
 PVSLFRETFFAGPVLLGLLFFVGLAVFIIYEVQVSGDGRTRQALVIYYSFNIVCLGLTTLVSLSGSIIY
 RFDRRAMDHHKNPRTLDVALLMGAALGQYAISSYIVAVVAGTPQDLLAGLNLTHALLMIAQHTFQNMFI
 IESLHRGPPGAEPHSTHPKEPCQDLTFNLDALHTLSACPPNPLVSPSPSDQREAVAIVSTPRSQWRR
 QCLKDISLFLLLCNVILWIMPAFGARPHFSNTVEVDFYGYSLWAVIVNICLPFGIFYRMHAVSSLLLEVYV
 LS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8013_c08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_178160

ORF Size: 1686 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_178160.3](#)

RefSeq Size: 1778 bp

RefSeq ORF: 1689 bp

Locus ID: 92736

UniProt ID: [Q7RTS6](#)

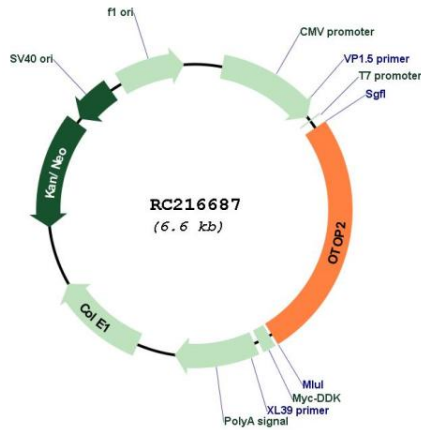
Cytogenetics: 17q25.1

Protein Families: Transmembrane

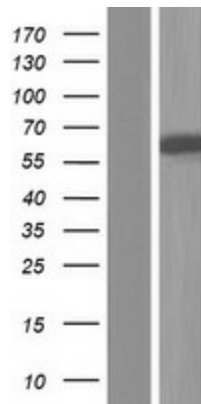
MW: 62.1 kDa

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 RC216687



Western blot validation of overexpression lysate (Cat# [LY406005]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216687 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).