

Product datasheet for **RR212829**

Otop1 (NM_181433) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otop1 (NM_181433) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Otop1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR212829 representing NM_181433
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCTGGGGACCGGGGCGCACTATCTTCTCCCGCAGCATCATCAGGCTCCCCGAGTGCCGCGCCGTGCG
 GGATCGCCGCATGCCCTCCGCCCGCTCTCCCTAGCCCGGGCGTCTCCACAAGCTTCCGGTCCCCGACG
 CGGTGCCAGCGTCCCGCAGAAGCTGGCGGAGACTCTGAGCAGCCAGTATGGACTGAACGTGTTCTGTGGCG
 GGGCTTCTTTCTGCTGGCCTGGGCGGTGCACGCGACGGGTGTGGGCAAGAGCGACCTGTTGTGCGTAT
 TAACCGCACTCATGCTGCTGCAGCTGCTCTGGATGCTGTGGTACGTGGTGCAGCTACATGCAGCGCCG
 CCTCATCCGCCCCAAGGACACGCACGCGGGTGCAGCTGGCTCCGCGGAAGCATCACATTGTTGCGATTC
 ATCACCATCGTCTGGGGTGCCTGAAAGTCGCATACTTCATTGGATTCTCAGAGTCTTGCAGCTACAG
 AGGGAGTTTTCCAGTACCCATGCAGTGCATACATTGTTGCAGGTCTATTTTCTCTGGGCCCACGCTAA
 AGATATTATCATGTCTTTCAAAACTGAAAAGTTTGGGGTATCCATTAGTGTTCACAAACCTGCTG
 CTGTGGGCCAACAGCGTCTGAATGAGTCAAACACCAGCTGAATGAACAAGAACCGGCTGATCACTC
 TGGGCTTCGGCAACATCACCATAGTTTTGGATGACCACACACCACAGTGAACGACACCCGCTGCCCT
 CTGCTCTGCCCTCTCCACGGGATTTACTATCTGTACCCCTTCAACATTGAGTACCAGATCCTGGCCTCG
 ACCATGCTCTATGTGCTGTGGAAGAACATTGGGCGCAGGGTGGACAGCTCCCGCACCAAGAGTGCAGT
 GCAGATTGCAGCGGGTCTGGTGGGCTCAGTGTGGGCTGACAGTGTGGCTGCCACCATCGCGGTGGT
 TGTGGTGTACATGATCCATATCGGGCGCTCCAAGTCCAAGAGTGAAGTGGCTCTTATCATGTTCTATTTG
 TATGCGATCACGGTGTGCTGCTCATGGGGCTGCGGGGCTGGTAGGAAGCTGGATTTACAGGGTGGATG
 AGAAGTCTCTGGATGAGTCAAAGAACCCAGCCGCAAGCTGGATGCTGACCTCTTGGTGGCCACTGCCTC
 GGGTTCCTGGCTCTCTCTGGGGTTCATTTTGGCCATCGCCTGCGCTGAGACCCGCCACCGTACACC
 TGGTACAACCTCCCTACTCTGTCTGGTATCGTGGAGAAGTACGTCCAGAACATTTTTCATCATTGAGT
 CGGTGCACCTCGAGCCTGAGGGGTCCCGAGGATGTGCGCACTCTGCGTGTGGTACCCTCTGCAGTGG
 GGAGGCTGCTGCACTGGCTGCATCGAGTCTCGGGAGCCAGGGGACGGCCAGGATGGGTACCTGCTGTC
 AATGGGAATCTGCATCTGCAGCAGAGGTGTGAGAAAGAGGACCAGGAGGCTGACTGGGAAGGAGCTACGG
 GGACAACCCGATGCTGGACTTCCTTCAAGGAGGCATGAAGAGGAGGCTGCTCAGAAACATCACAGCCTT
 TCTGTTCTTTGCAACATCTCGCTTTGGATTCCCCTGCCTTTGGCTGCCGTCCCGAGTATGACAACGGA
 CTGGAGGAAATTGCTTTGGCTTTGAACCTGGATAATTGTGGTCAACCTGGCCATGCCCTTCTCCATT
 TCTACAGGATGCACGCAGCTGCCGCCCTTTGAGGTCTATTGAAAATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212829 representing NM_181433
 Red=Cloning site Green=Tags(s)

MPGDRGALSSPAASSGSPSAAPSGIAACPPPPSPLARASPAQASGPRRGASVPQKLAETLSSQYGLNVFVA
 GLLFLLAWAVHATGVGKSDLCLVLTALMLLQLLWMLWYVGRSYMQRRLIRPKDTHAGARWLRGSITLFAF
 ITIVLGLCKVAYFIGFSECLSAIEGVFPVTHAVHTLLQVYFLWGHAKDIIMSFKTLERFVGIHVSFTNLL
 LWANSVLNESKHQLNEHKERLITLGFGNITIVLDDHTPQCNTPPALCSALSHGIYYLYPFNIEYQILAS
 TMLYVLWKNIGRRVDSSRHQKMQCRFDGVLVGSVLGLTVLAATIIVVVVYMIHIGRSKSKSESALIMFYL
 YAITVLLL MGAAGLVGSIYRVDEKSLDESKNPARKLDADLLVATASGSWLLSWGSILAIACAETRPPT
 WYNLPYSVLVIVEKYVQNIIFIIESVHLEPEGVPEVDRTLRVVTVCSGEAAALAASSLGSQGTADQDSPA
 VNGNLHLQQRCEKEDQADWEGATGTTTRCLDFLQGGMKRRLRNITAFLLCNISLWIPPAFGCRPEYDNG
 LEEIVFGFEPWIIVVNLAMPFSIFYRMHAAAALFEVYCKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

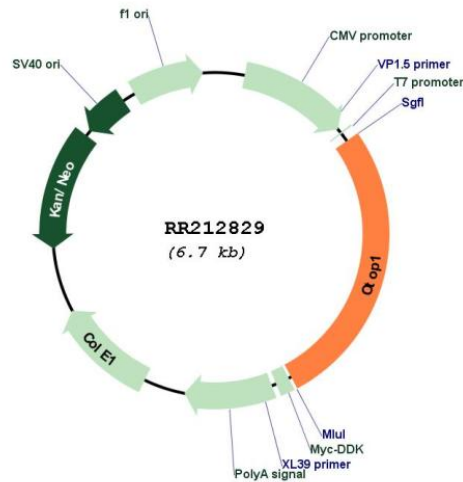
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:

NM_181433

ORF Size:	1800 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:	<ol style="list-style-type: none">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_181433.1 , NP_852098.1
RefSeq Size:	1827 bp
RefSeq ORF:	1803 bp
Locus ID:	305427
UniProt ID:	Q7M734
Cytogenetics:	14q21
MW:	65.9 kDa
Gene Summary:	may play a role in the biosynthesis of otoconia, which are inner ear biominerals required for perception of gravity and linear acceleration [RGD, Feb 2006]