

Product datasheet for **MC216717**

Otol1 (NM_001018031) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otol1 (NM_001018031) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Otol1
Synonyms:	Gm414
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC216717 representing NM_001018031
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGATATTTTCTTCGCTTTGTGCTGTTTTAACTATTTTGGCTATGGATGATGTGCCACAGAAGCAA
 AGACCACACCATACACCAAATTTACGAAGAAATCTGAAGGAAAAGAGATGTTGAAGGGCTTAAAGCCGTC
 CAGTGGCTTCTTTCTGGATGGAGAAGAAACCGTCCATACGAAACGGCTGCCATGGCAGAGCCCACCACC
 GGCTCCCCTGCCTTGGCAATGGCTGAGTCCACCGCAGGCCCTCGGCCTCTGCCACAACCCGTCTCCTTC
 CCTTCGAGAGCTTCTCTCTGGACACAACGGTTTCGTTTTGAATTGCTGCCATTGTTGTTCAATTTGTAC
 TGGGCAGAAAGGAGAACCCGAAAGATGGGAAAACAAGGCCCTAAAGGAGAGACTGGTGACTGGCAGC
 CCAGGACACCCAGGAACCACTGGACCTCAAGTCCAAAGGCCAGAAAGGAGAGAAAGGACTAAAGGGAG
 ACCGGGGGACCAAGGAGCAGGTGGCATTCCGGGGTACCCAGGAAAACCAGGAGAGCAAGGTGCACTTGG
 TCCAAGGGAGATAAAGGAACCATCGGCCCGGCAGGAACGAAAGGACAAAAGGCTCTAAGGAGAAGTGT
 GTGGGAATGGCACTAAAGGAGAGAAAGGGGACCCTGGGGCTCTGGGGCCCATGGCTTCATTGGAGAGC
 CTGGGGCAAGGGCGAGAAGGGTGGTGTGGGGAGAAAGGCTACCGAGGAGATTTGGGGAAAGGGGAGA
 AAAGGGGCAGAAAGGCGAGAAAGGGATGGAGGGAGAGAAAGGTAGCAGAGGAGATGTTGGGTGAGAGGC
 AAAAGGGGTTTCAGATGGTCTACCAGGGCTCAGAGGCGATTCTGGTCTAAAGGAGAAAAAGGAGAGATAG
 GTTCTCTGGTTTCACCGGACCTCGGGGACCAAGGGTGGAGCTTGAAGCAAAGGTGTTTCGAGGGCCAAC
 AGGGAAGAAGGGCTCTCGGGGTGCAAGGGTCCAAAGGCGAGGCCACACAAGTCCCACAGTCGGCTTTC
 AGTGCCCTTTTATCCAAGCCCTCCCTCCCCAACGTTCCCATCAAGTTTGACAAGATTCTCTCTAATG
 ACCAAGGGGATTACAGCCCGCTCACTGGGAAATTTAACTGTAGTGTTCCTGGGACATACATATTTTCCTA
 TCATGTCACTGTGAGGGTTCGACCTGCTCGGATCAGCCTCGTGGCCCGCAACAGGAAGCAGTTCAAATCC
 AGAGAGACGCTCTATGGTCAGCAAGTAGATCAGGCCTCCCTCCTCCTCATTCTGAAATTGAGTGCAGGAG
 ATCAAGTGTGGCTGGAAGTGTCAAAGGACTGGAATGGGCTGTATGTCGGCCCGAGGATGACAGCATCTT
 TAGTGGTTCTCTGTACCCAGAGGAACTTTTAGTAAGTCACCA**TAA**

ACGGTACGGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001018031

Insert Size: 1449 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001018031.2](#), [NP_001018041.2](#)

RefSeq Size: 2161 bp

RefSeq ORF: 1449 bp

Locus ID: 229389

UniProt ID: [Q4ZJM7](#)

Cytogenetics: 3 E2

Gene Summary: Collagen-like protein specifically expressed in the inner ear, which provides an organic scaffold for otoconia, a calcium carbonate structure in the saccule and utricle of the ear (PubMed:21655225, PubMed:24748133, PubMed:29076638). Acts as a scaffold for biomineralization: sequesters calcium and forms interconnecting fibrils between otoconia that are incorporated into the calcium crystal structure (PubMed:21655225, PubMed:24748133, PubMed:29076638). Together with OC90, modulates calcite crystal morphology and growth kinetics (PubMed:24748133).[UniProtKB/Swiss-Prot Function]