

Product datasheet for **MC229688**

Otof (NM_001286421) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otof (NM_001286421) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Otof
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC229688 representing NM_001286421 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCCTGATTGTTACCTCAAGACTGTCTCAGAGCTCCGAGGCAAAGGTGACCGGATTGCCAAAGTCA
CTTCCGAGGGCAGTCTTTCTACTCCCGGGTCTGGAGAACTGCGAGGGTGTGGCTGACTTTGATGAGAC
GTTCCGGTGGCCAGTGGCCAGCAGCATCGACCGGAATGAAGTGTGGAGATTGAGATTTCAACTACAGC
AAAGTCTTCAGCAACAAGCTGATAGGGACCTTCTGCATGGTGTGCAGAAAGTGGTGGAGGAGAATCGGG
TAGAGGTGACCGACAGCTGATGGATGACAGCAATGCTATCATCAAGACCAGCCTGAGCATGGAGGTCCG
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AGAAGAGCTTTTCGAGAGCGGGAAGGAGTGTGTTCTCGGCCATGAACTCGGCAGAACTCGGTCCCAAA
AGAGGAGCCCCAAGACAAGATGAGCCAGCAGTGTGGAGATGGAGGACCTGGACCACCTAGCCATTGAG
CTGGGGGATGGGCTGGATCCTGACTCCGTGTCTAGCCTCGGTACCGCTCTACCAGCAATGTCTCCA
ACAAACGGTCTAAGCCAGATATTAAGATGGAGCCAGTGTGGAAGGCCCATGGATTACCAGGTGAGCAT
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TTCCATCACAATGGGCCATCCTGTGACACCCGATGACATCTCTGCTGGGTTGAAGGGTTATGTAAAGT
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TGCAACGCATGAAGGTGACAGTCCGGGACTCTGACAAGGTCAATGATGTGGCCATCGGCACCCACTTCA
TCGACCTGCGCAAGATTTCCAACGATGGAGACAAGGCTTCTGCCTACCTCGGTCCAGCCTGGGTGAA



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CATGTACGGCTCCACGCGCAACTACACACTGCTGGACGAGCACCAGGACTTGAATGAAGGCCTGGGGAG
GGTGTGTCTTCCGGGCCCGCTCATGTTGGGACTAGCTGTGGAGATCCTGGACACCTCCAAACCAGAGC
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AGTCCAGAGCTGCAAAGGAGGAGAAAAAGAAAAACAGAGCCCTGGCCCTGGCCAGGGATCGGAGGC
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TGTATCTCGAGAAGCTGGCTATGATCCCACTATGGAATGTTCCAGGGCATCCCAAGCAATGACCCCATC
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CAACCCTGTGTTGGGAAGTCTTTGACATTGAGGCCTCCTTCCCATGGAGTCCATGTTGACAGTGGCC
GTGTACGACTGGGATCTGGTGGGCACTGATGACCTCATCGGAGAAACCAAGATTGACCTGGAAAACCGCT
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GGTCCCCATGGGAGAGTGAAGGTTGCCAACCGTGTCTTACGGGGCTTCCAGAAATAGAGGATGAGAATG
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CAGGGCCGCTGGAGCTGTGGGTGGACATGTTCCCATGGACATGCCAGCCCCTGGGACACCTCTGGATA
TATCCCCCAGGAAACCAAGAAGTACGAGCTGCGGGTATCGTGTGGAACACAGACGAGGTGGTCTGGA
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GAGGACAAACAGGACACAGATGTCCACTATCACTCCCTCACGGGGGAGGGCAACTTCAACTGGAGATACC
TCTTCCCCTTCGACTACCTAGCGGCCGAAGAGAAGATCGTTATGTCCAAAAGGAGTCTATGTTCTCCTG
GGATGAGACGGAGTACAAGATCCCTGCGCGGCTCACCTGCAGATCTGGGACGCTGACCACTTCTCGGCT
GACGACTTCTGGGGGCTATCGAGCTGGACCTGAACCGGTTCCCGAGGGGCGCTAAGACAGCCAAGCAGT
GCACCATGGAGATGGCCACCGGGGAGGTGGACGTACCCCTGGTTTCCATCTTTAAACAGAAACGTGTCAA
AGGCTGGTGGCCCTCCTGGCCCGCAATGAGAATGATGAGTTTGAGCTCACAGGCAAAGTGGAGGCGGAG
CTACACCTACTCACGGCAGAGGAGCAGAGAAGAACCCTGTGGCCTGGCTCGCAATGAACCTGATCCCC
TAGAAAAACCCAATCGGCCGGACACAAGCTTCATCTGGTTCTTGAACCCTCTCAAGTCTGCCGCTACTT
CCTGTGGCATACCTACCGCTGGTACTCTCAAATTCCTGCTGCTCTTCTCTGCTGCTGCTCTTCGCC
CTGTTTCTCTACTCTCTGCCTGGCTACCTGGCCAAGAAGATCCTTGGGGCCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001286421
Insert Size:	5934 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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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 0.22um filter is required.
RefSeq:	<u>NM_001286421.1, NP_001273350.1</u>
RefSeq Size:	7065 bp
RefSeq ORF:	5934 bp
Locus ID:	83762
UniProt ID:	<u>Q9ESF1</u>
Cytogenetics:	5 B1

Gene Summary:

Key calcium ion sensor involved in the Ca^{2+} -triggered synaptic vesicle-plasma membrane fusion and in the control of neurotransmitter release at these output synapses. Interacts in a calcium-dependent manner to the presynaptic SNARE proteins at ribbon synapses of cochlear inner hair cells (IHCs) to trigger exocytosis of neurotransmitter. Also essential to synaptic exocytosis in immature outer hair cells (OHCs). May also play a role within the recycling of endosomes.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) uses an alternate in-frame splice site in the 3' coding region, compared to variant 2. It encodes isoform 3, which is shorter than isoform 2.