

Product datasheet for MC225108

Otof (NM_001100395) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Otof (NM_001100395) Mouse Untagged Clone
Tag: Tag Free
Symbol: Otof
Synonyms: MGC183613
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225108 representing NM_001100395
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCTGATTGTTACCTCAAGACTGTCTCAGAGCTCCGAGGCAAAGGTGACCGGATTGCCAAAGTCA
CTTTCCGAGGGCAGTCTTTCTACTCCCGGGTCTGGAGAAGTCCGAGGGTGTGGCTGACTTTGATGAGAC
GTTCCGGTGGCCAGTGGCCAGCAGCATCGACCGGAATGAAGTGTGGAGATTCAGATTTTCAACTACAGC
AAAGTCTTCAGCAACAAGCTGATAGGGACCTTCTGCATGGTGTGCAGAAAGTGGTGGAGGAGAATCGGG
TAGAGGTGACCGACACGCTGATGGATGACAGCAATGCTATCATCAAGACCAGCCTGAGCATGGAGGTCCG
GTATCAGGCCACAGATGGCACTGTGGGCCCTGGGATGATGGAGACTTCTGGGAGATGAATCCCTCCAG
GAGGAGAAGGACAGCCAGGAGACAGATGGGCTGTACCTGGTTCCCGACCCAGCACCCGGATATCTGGCG
AGAAGAGCTTTCGAGCAAAGGCAGAGAGAAGACCAAGGGAGGCAGAGATGGCGAGCACAAAGCGGGAAG
GAGTGTGTTCTCGGCCATGAAACTCGGCAAACTCGGTCCCAAAAGAGGAGCCCCAAAGACAAGATGAG
CCAGCAGTGTGGAGATGGAGGACCTGGACCACCTAGCCATTAGCTGGGGGATGGGCTGGATCCTGACT
CCGTGCTCTAGCCTCGTCCCGTCTCACCAGCAATGTCTCCAACAAACGGTCTAAGCCAGATATTA
GATGGAGCCAGTGTGGAAGGCCATGGATTACCAGGTCAGCATCACAGTATTGAGGCTCGGCAGCTG
GTGGGCTTGAACATGGACCCTGTGGTGTGTGGAGGTGGTGTGACAAGAAATACACGTCAATGAAGG
AGTCCACAAACTGCCCTTACTACAACGAGTACTTTGTCTTCGACTTCCATGTCTCTCCTGATGTCATGTT
TGACAAGATCATCAAGATCTCGTTATCCATTCTAAGAACCTGCTTCGGAGCGGCACCCTGGTGGTTCC
TTCAAAATGGATGTGGGACTGTGATTTCCAGCCTGAACACCAGTTCATCACAATGGCCATCCTGT
CAGACCCCGATGACATCTCTGCTGGGTTGAAGGGTTATGTAAGTGTGATGTCGCTGTGGTGGGCAAGG
AGACAACATCAAGACACCCACAAGGCCAACGAGACGGATGAGGACGACATTGAAGGGAAGTCTGCTGC
CCCGAGGGCGTGCCCCCGAACGGCAGTGGGCACGGTTCTATGTGAAAATTTACCAGCAGAGGGACTGC
CCCGGATGAACACAAGCCTCATGGCCAAGTGAAGAAGGGTTTCATCGGTGAGAACAAGGACCTCGTCGA
CCCCTATGTGCAAGTCTTCTTGTGGACAAAAGGGCAAAACATCAGTGCAGAAGAGCAGCTATGAGCCG
CTATGGAATGAGCAGGTCGTCTTACAGACTTGTCCCCCACTCTGCAACGCATGAAGGTGCAGATCC



GGGACTCTGACAAGGTCAATGATGTGGCCATCGGCACCCACTTCATCGACCTGCGCAAGATTTCCAACGA
TGGAGACAAAAGGCTTCTGCCTACCCTCGGTCCAGCCTGGGTGAACATGTACGGCTCCACGCGCAACTAC
ACACTGCTGGACGAGCACCAGGACTTGAATGAAGGCTGGGGGAGGGTGTGTCTTCCGGGCCCCCTCA
TGTTGGGACTAGCTGTGGAGATCCTGGACACCTCCAACCCAGAGCTCACCAGCTCCACGGAGGTGCAGGT
GGAGCAGGCCACGCTGTCTCGGAGAGCTGCACAGGGAGAATGGAAGAATTTTTTCTATTTGGAGCCTTC
TTGGAAGCCTCAATGATTGACCGGAAAAATGGGACAAGCCAATTACCTTTGAGGTGACCATAGGAAAT
ACGGCAATGAAGTCGATGGTATGTCCCGGCCCTGAGGCCCTCGGCCCGGAAAGACCTGGGGATGAAGA
AGAGGTAGACCTGATTCAGAATCCAGTGACGATGAAGGTGACGAAGCCGGGGACCTGGCCTCGGTGTCC
TCCACCCACCTATGCGGCCCGAGATCACGGACAGGAACATTTCCACCTGCCCTACCTGGAGCGCAAGC
CCTGCATCTATATCAAGAGCTGGTGGCCTGACCAGAGGGCGGCCTCTACAATGCCAACATCATGGATCA
CATTGCTGACAAGCTGGAAGAAGCCTGAATGATGTACAGGAGATGATCAAAACGGAGAAGTCTACCCG
GAGCGCCGCTGCGGGTGTGCTAGAGGAACTCAGCTGTGGTGCCACCGCTTCTCTCCCTCTCGGACA
AGGACCAGGGCCGCTCGTCCCGCACCAGGCTGGATCGAGAGCGTCTTAAGTCTGTATGAGGGAGTTGGA
GAGCATGGGACAGCAGGCCAAGAGCCTGAGGGCTCAGGTGAAGCGGCACACTGTTCCGGACAAGCTGAGG
TCATGCCAGAATTTCTGCAGAAGCTACGCTTCTGGCGGATGAGCCCCAGCACAGCATTCTGATGTGT
TCATTTGGATGATGAGCAACAACAACGTATCGCCTATGCCCGCTGCCTTCCAAAGACCTGCTCTTCTC
CATCGTGGAGGAGGAACGGCAAGGACTGCGCCAAAAGTCAAGACCCCTTCTCTGAAGCTGCCAGGGAAG
AGGGGCTTCGGCTCGGCAGGCTGGACAGTACAGGCCAAGCTGGAGCTCTACCTGTGGCTGGGCCTCAGCA
AGCAGCGAAAAGGACTTCTGTGTGGTCTGCCCTGTGGCTTCGAGGAGGTCAAGGCAGCCCAAGGCCTGGG
CCTGCATTCCTTTCCGCCATCAGCCTAGTCTACACCAAGAAGCAAGCCTTCCAGCTCCGAGCACACATG
TATCAGGCCCGAAGCCTTTTGTGTGACAGCAGTGGCTCTCTGATCCCTTTGCCCGTGTCTTCTTCA
TCAACCAAGCCAAATGCACTGAGGTTCTAAACGAGACACTGTGTCCACCTGGGACCAGATGCTGGTATT
TGACAACCTGGAGCTGTACGGTGAAGCTCAGAGTTACGAGATGATCCCCCATCATTGTCAATGAATC
TAGCAACAGGACAGCATGGGCAAAAGCCGACTTCAATGGGCCGACCTTCGCAAGCCCTGGTGAAGATGG
CAGATGAAGCATACTGCCACCTCGCTTCCCGCCGAGCTTGAGTACTACCAGATCTACCAGGCAGTGC
CACTGCCGGAGACCTACTGGCTGCCTTCGAGTCTGCAGATTGGGCCATCAGGGAAGGCTGACCTGCCA
CCCATCAATGGCCAGTGGACATGGACAGAGGGCCATCATGCCTGTGCCCGTGGGAATCCGGCCAGTGC
TCAGCAAGTACCGAGTGGAGGTGCTGTTCTGGGGCTGAGGGACCTAAAGAGGGTGAACCTGGCCAGGT
GGACCGACCACGGGTGGACATCGAGTGTGACAGAAAGGGGTACAATCCTCCCTGATTACAATTATAAG
AAGAACCCCAACTCAACACGCTGGTCAAGTGGTTTGAAGTGGACCTCCCGGAGAATGAGCTCCTGCACC
CACCTTGAACATCCGAGTGGTAGATTGCCGGCCTTTGGACGATACACCCTGGTGGGTTCCACGCAGT
CAGCTCACTGAGCGCTTCACTACCGACTCCAGACCGCTCAGCCCCAACTGGAACACCACAGGGGAG
GTTGTAGTAAGCATGGAGCCTGAGGAGCCAGTTAAGAAGCTGGAGACCATGGTGAACCTGGATGCGACTT
CTGATGCTGTGGTCAAGGTGGATGTGGCTGAAGATGAGAAGGAAAAGGAAGAAGAAAAGAAAGGCC
GTCAGAGGAGCCAGAGGAGGAAGAGCCCGATGAGAGCATGCTGGATTGGTGGTCCAAGTACTTCCGCTCC
ATCGACACAATGAAGGAGCAACTTCGACAAATGAGACCTCTGGAAGTACTTGGAAAGAGAAGGAAGAGA
TGGAAAGCGCTGAGGGCCTGAAGGGACCAATGAAGAGCAAGGAGAAGTCCAGAGCTGCAAGGAGGAGAA
AAAGAAGAAAACAGAGCCCTGGCCCTGGCCAGGGATCGGAGGCTCTGAGAAGAAGAAAGCCAAGATC
GATGAGCTTAAGGTGTACCCCAAGGAGCTGGAATCGGAGTTTACAGCTTTGAGGACTGGTGCACACT
TCAACCTGTTGAGGGCAAGACGGGAGATGATGAGGATGGCTCCACAGAGGAGGAGCGCATAGTAGGCCG
ATTCAAGGGCTCCCTCTGTGTGACAAAGTGCCACTCCCAGAAGATGTATCTCGAGAAGTGGCTATGAT
CCCACCTATGGAATGTTCCAGGGCATCCCAAGCAATGACCCCATCAATGTGCTGGTCCGAATCTATGTGG
TCCGGGCCACAGACCTGCACCCGGCCGACATCAATGGCAAAGCTGACCCCTATATTGCCATCAAGTTAGG
CAAGACCGACATCCGAGACAAGGAGAACTACATCTCCAAGCAGCTCAACCCTGTGTTGGGAAGTCTTT
GACATTGAGGCCCTCTTCCCATGGAGTCCATGTTGACAGTGGCCGTGTACGACTGGGATCTGGTGGGCA
CTGATGACCTCATCGGAGAAACCAAGATTGACCTGGAAAACCGCTTCTACAGCAAGCATCGGCCACCTG
CGGCATCGCACAGACCTATTCCATACATGGCTACAATATCTGGAGGGACCCCATGAAGCCCAGCCAGATC
CTGACACGCCCTGTAAAGAGGGCAAAGTGGACGGCCCCACTTTGGTCCCATGGGAGAGTGGGGTTG
CCAACCGTGTCTTACGGGGCTTCAGAAAATAGAGGATGAGAATGGTCAGAGGAAGCCCACAGATGAGCA
CGTGGCACTGTCTGCTCTGAGACACTGGGAGGACATCCCCGGGTGGGCTGCCGCCTTGTGCCGGAACAC
GTGGAGACCAGGCCGCTGCTCAACCCTGACAAGCCAGGCATTGAGCAGGGCCGCTGGAGCTGTGGGTGG
ACATGTTCCCATGGACATGCCAGCCCTGGGACACCTCTGGATATATCCCCAGGAAACCAAGAAGTA

CGAGCTGCGGGTCATCGTGTGGAACACAGACGAGGTGGTCTGGAAGACGATGATTTCTTCACGGGAGAG
 AAGTCCAGTGACATTTTTGTGAGGGGGTGGCTGAAGGGCCAGCAGGAGGACAAACAGGACACAGATGTCC
 ACTATCACTCCCTCACGGGGGAGGGCAACTTCAACTGGAGATACCTCTTCCCCTTCGACTACCTAGCGGC
 CGAAGAGAAGATCGTTATGTCCAAAAGGAGTCTATGTTCTCCTGGGATGAGACGGAGTACAAGATCCCT
 GCGCGGCTCACCTGCAGATCTGGGACGCTGACCATTCTCGGCTGACGACTTCTGGGGGCTATCGAGC
 TGGACCTGAACCGTTCCCGAGGGGCGCTAAGACAGCAAGCAGTGCACCATGGAGATGGCCACCGGGGA
 GGTGGACGTACCCTGGTTTCCATCTTTAAACAGAAACGTGTCAAAGGCTGGTGGCCCTCCTGGCCCGC
 AATGAGAATGATGAGTTTGAGCTCACAGGCAAAGTGGAGGCGGAGCTACACCTACTCACGGCAGAGGAGG
 CAGAGAAGAACCCTGTGGCCTGGCTCGCAATGAACCTGATCCCCTAGAAAAACCAACCGGCTGACAC
 GGCATTCTGTTCTGAACCACTCAAATCTCAAGTACCTCATCTGCACCCGGTACAAGTGGCTG
 ATCATCAAGATCGTGGCGCTGCTGGGGCTGCTCATGCTGGCCCTCTTCTTTACAGCCTCCCAGGCT
 ACATGGTCAAGAAGCTCCTAGGGGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001100395
- Insert Size:** 5979 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_001100395.1](#), [NP_001093865.1](#)
- RefSeq Size:** 6907 bp
- RefSeq ORF:** 5979 bp
- Locus ID:** 83762
- UniProt ID:** [Q9ESF1](#)
- 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 (1) contains multiple coding region differences resulting in different 3' coding region and 3' UTR, compared to variant 2. It encodes isoform 1, which is shorter and has a distinct C-terminus, compared to isoform 2.