

Product datasheet for **SC338120**

Otoferlin (OTOF) (NM_001287489) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otoferlin (OTOF) (NM_001287489) Human Untagged Clone
Tag:	Tag Free
Symbol:	Otoferlin
Synonyms:	AUNB1; DFNB6; DFNB9; FER1L2; NSRD9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001287489, the custom clone sequence may differ by one or more nucleotides

ATGGCCTTGCTCATCCACCTCAAGACAGTCTCGGAGCTGCGGGGAGGGGCGACCGGATCGCCAAAGTGA
CTTTCCGAGGGCAATCCTTCTACTCTCGGGTCTGGAGAACTGTGAGGATGTGGTGACTTTGATGAGAC
ATTTCCGTGGCCGGTGGCCAGCAGCATCGACAGAAATGAGATGCTGGAGATTGAGTTTCAACTACAGC
AAAGTCTTCAGCAACAAGCTCATCGGGACCTCCGCATGGTGCTGCAGAAGGTGGTAGAGGAGAGCCATG
TGGAGGTGACTGACACGCTGATTGATGACAACAATGCTATCATCAAGACCAGCCTGTGCGTGGAGGTCCG
GTATCAGGCCACTGACGGCACAGTGGGCTCCTGGGACGATGGGGACTTCTGGGAGATGAGTCTCTTCAA
GAGGAAGAGAAGGACAGCCAAGAGACGGATGGACTGCTCCAGGCTCCCGGCCAGCTCCCGGCCCCCAG
GAGAGAAGAGCTTCCGGAGAGCCGGGAGGAGCGTGTTCTCCGCCATGAAGCTCGGCAAAAACCGGTCTCA
CAAGGAGGAGCCCCAAAGACCAGATGAACCGGCGGTGCTGGAGATGGAAGACCTTGACCATCTGGCCATT
CGGCTAGGAGATGGACTGGATCCCGACTCGGTGTCTCTAGCCTCAGTCACAGCTCTCACCATAATGTCT
CCAACAAGCGATCTAAGCCAGACATTAAGATGGAGCCAAGTGCTGGGCGGCCCATGGATTACCAGGTCAG
CATCACGGTGATCGAGGCCCGGCAGCTGGTGGGCTTGAACATGGACCCTGTGGTGTGCGTGGAGGTGGGT
GACGACAAGAAGTACACATCCATGAAGGAGTCCACTAACTGCCCTATTACAACGAGTACTTCGTCTTCG
ACTTCCATGTCTCTCCGATGTCTGTTGACAAGATCATCAAGATTTCCGTGATTCACTCCAAGAACCT
GCTGCGCAGTGGCACCCTGGTGGGCTCCTTCAAAATGGACGTGGGAACCGTGACTCGCAGCCAGAGCAC
CAGTTCATCACAAAGTGGGCCATCTGTCTGACCCCGATGACATCTCCTCGGGGCTGAAGGCTACGTGA
AGTGTGACGTTGCCGTGGTGGGCAAAGGGGACAACATCAAGACGCCCCACAAGGCCAATGAGACCGACGA
AGATGACATTGAGGGGAACCTTGCTGCTCCCGAGGGGGTGCCCCCGAACGCCAGTGGGCGCGTTCTAT
GTGAAAATTTACCGAGCAGAGGGGCTGCCCCGTATGAACACAAGCCTCATGGCCAATGTAAGAAGGCTT
TCATCGGTGAAAACAAGGACCTCGTGGACCCCTACGTGCAAGTCTTCTTTGCTGGCCAGAAGGGCAAGAC
TTCAGTGCAGAAGAGCAGCTATGAGCCCTGTGGAATGAGCAGGTCGTCTTACAGACCTTCTCCCCCA
CTCTGCAAACGCATGAAGGTGCAGATCCGAGACTCGGACAAGGTCAACGACGTGGCCATCGGCACCCACT
TCATTGACCTGCGCAAGATTTCTAATGACGGAGACAAAGGCTTCTGCCACACTGGGCCAGCCTGGGT



[View online »](#)

GAACATGTACGGCTCCACACGTAACACACGCTGCTGGATGAGCATCAGGACCTGAACGAGGGCCTGGG
GAGGGTGTGCTCTCCGGGCCGGCTCCTGCTGGGCCTGGCTGTGGAGATCGTAGACACCTCCAACCTG
AGCTCACCAGCTCCACAGAGGTGCAGGTGGAGCAGGCCACGCCATCTCGGAGAGCTGTGCAGGTA
GGAAGAATTCTTTCTCTTTGGAGCCTTCTGGAGGCCTCAATGATCGACCGGAGAAACGGAGACAAGCCC
ATCACCTTTGAGGTCACCATAGGCAACTATGGGAACGAAGTTGATGGCCTGTCCCGGCCCAGCGGCCTC
GGCCCCGAAGGAGCCGGGGGATGAGGAAGAAGTAGACCTGATTGAGAACGAAGTATGACGAGGCCG
TGATCCCGGGGACCTGGCCTCAGTCTCTCCACTCCACCAATGCGGCCCAGGTACCCGACAGGAAC
TTCCATCTGCCCTACCTGGAGCGAAAGCCCTGCATCTACATCAAGAGCTGGTGGCCGACACGCGCC
GCCTCTACAATGCCAACATCATGGACCACATTGCCGACAAGCTGGAAGAAGGCCTGAACGACATACAGGA
GATGATCAAAACGGAGAAGTCTACCCTGAGCGTCGCCTGCGGGGCGTCTGGAGGAGCTGAGCTGTGGC
TGCTGCCGCTTCTCTCCCTCGCTGACAAGGACCAGGGCCACTCATCCCGCACCAGGCTTGACCGGGAGC
GCCTCAAGTCTGCATGAGGGAGCTGGAACATGGGGCAGCAGGCCAGGATGCTGCGGGCCAGGTGAA
GCGGCACACGGTGCAGGACAAGCTGAGGCTGTGCCAGAACTTCTGCAGAACTGCGCTTCTGGCGGAC
GAGCCCCAGCACAGCATTCCCGACATCTTCATCTGGATGATGAGCAACAACAAGCGTGTGCGCTATGCC
GTGTGCCCTCAAGGACCTGCTCTTCTCCATCGTGGAGGAGGAGACTGGCAAGGACTGCGCAAGGTCAA
GACGCTCTTCTTAAGCTGCCAGGGAAGCGGGCTTCGGCTCGGACGGCTGGACAGTGCAGGCCAAGGTG
GAGCTGTACCTGTGGCTGGGCCTCAGCAACAGCGCAAGGAGTTCCTGTGCGGCCTGCCCTGTGGCTTCC
AGGAGGTCAAGGCAGCCAGGGCCTGGGCCTGCATGCCTTCCACCCGTCAGCCTGGTCTACACCAAGAA
GCAGGCGTTCCAGCTCCGAGCGCACATGTACCAGGCCCGCAGCCTCTTTCGCCCGACAGCAGCGGACTC
TCAGACCCCTTTGCCCGCTTCTTTCATCAATCAGAGTCAGTGACAGAGGTGCTGAATGAGACCTGT
GTCCCACCTGGGACCAGATGCTGGTGTTCGACAACCTGGAGCTCTATGGTGAAGCTCATGAGCTGAGGGA
CGATCCGCCCATCATTGTCAATTGAAATCTATGACCAGGATTCCATGGGCAAGCTGACTTCATGGGCCGG
ACCTTCGCCAAACCCCTGGTGAAGATGGCAGACGAGGCTACTGCCACCCCGCTTCCACCTCAGCTCG
AGTACTACAGATCTACCGTGGCAACGCCACAGCTGGAGACCTGCTGGCGCCTTCGAGCTGCTGCAGAT
TGGACCAGCAGGGAAGGCTGACCTGCCCCCATCAATGGCCCGGTGGACGTGGACCGAGGTCCCATCATG
CCCGTGCCCATGGGCATCCGGCCCGTGTCTCAGCAAGTACCGAGTGGAGGTGCTGTTCTGGGGCTACGGG
ACCTAAAGCGGGTGAACCTGGCCAGGTGGACCGGCCACGGGTGGACATCGAGTGTGAGGGAAGGGGT
GCAGTCGTCCTGATCCACAATTATAAGAAGAACCCCACTTCAACACCCCTCGTCAAGTGGTTTGAAGTG
GACCTCCAGAGAACGAGCTGCTGCACCCGCCCTTGAACATCCGTGTGGTGGACTGCCGGCCTTCGGTC
GCTACACACTGGTGGGCTCCCATGCCGTGAGTCCCTGCGACGCTTCATCTACCGCCCCCAGACCGCTC
GGCCCCCAGCTGGAACACCACGGTCAGGCTTCTCCGGCGTGGCGTGTGCTGTGCAATGGGGCTCCTCC
TCTCACTCCACAGGGGAGGTTGTGGTGACTATGGAGCCAGAGGTACCCATCAAGAACTGGAGACCATGG
TGAAGCTGGACGCGACTTCTGAAGCTGTTGTCAAGGTGGATGTGGCTGAGGAGGAGAAGGAGAAGAA
GAAGAAGAAGGGCACTGCGGAGGAGCCAGAGGAGGAGGCCAGACGAGAGCATGCTGGACTGGTGGTCC
AAGTACTTTGCCTCCATTGACACCATGAAGGAGCAACTTCGACAACAAGAGCCCTCTGGAATTGACTTGG
AGGAGAAGGAGGAAGTGGACAATACCGAGGGCCTGAAGGGGTCAATGAAGGGCAAGGAGAAGGCAAGGGC
TGCCAAAGAGGAGAAGAAGAAGAACTCAGAGCTCTGGCTCTGGCCAGGGGTCCGAGGCCCCCGAGAAG
AAGAAACCAAGATTGATGAGCTTAAGGTATACCCAAAGAGCTGGAGTCCGAGTTTGATAACTTTGAGG
ACTGGCTGCACACTTTCAACTTGCTTCGGGGCAAGACCGGGGATGATGAGGATGGCTCCACCGAGGAGGA
GCGCATTGTGGGACGCTTCAAGGGCTCCCTCTGCGTGTACAAAGTGCCACTCCAGAGGACGTGTCCCGG
GAAGCCGGCTACGACTCCACCTACGGCATGTTCCAGGGCATCCCAGCAATGACCCCATCAATGTGCTGG
TCCGAGTCTATGTGGTCCGGGCCACGGACCTGCACCTGCTGACATCAACGGCAAGCTGACCCCTACAT
CGCCATCCGGCTAGGCAAGACTGACATCCGCGACAAGGAGAACTACATCTCAAGCAGCTCAACCTGTC
TTTGGGAAGTCTTTGACATCGAGGCCTCTTCCCATGGAATCCATGCTGACGGTGGCTGTGTATGACT
GGGACCTGGTGGCACTGATGACCTCATTGGGGAACCAAGATCGACCTGGAGAACCGCTTCTACAGCAA
GCACCGCGCCACCTGCGGCATCGCCAGACCTACTCCACATATGGCTACAATATCTGGCGGGACCCCATG
AAGCCCAGCCAGATCCTGACCCGCTCTGCAAAGACGGCAAAGTGACGCGCCCCACTTTGGGCCCTTG
GGAGAGTGAAGGTGGCAACCGCTCTTCACTGGGCCCTCTGAGATTGAGGACGAGAACGGTCAGAGGAA
GCCACAGACGAGCATGTGGCGCTGTTGCCCTGAGGCACTGGGAGGACATCCCCCGCGCAGGCTGCCGC
CTGGTGCCAGAGCATGTGGAGACGAGGCCGCTGCTCAACCCGACAAGCCGGGCATCGAGCAGGGCCGCC
TGGAGCTGTGGGTGGACATGTTCCCATGGACATGCCAGCCCCTGGGACGCTCTGGACATCTCACCTCG
GAAGCCCAAGAAGTACGAGCTGCGGGTCATCATCTGGAACACAGATGAGGTGGTCTTGGAGGACGACGAC

```

TTCTTCACAGGGGAGAAGTCCAGTGACATCTTCGTGAGGGGGTGGCTGAAGGGCCAGCAGGAGGACAAGC
AGGACACAGACGTCCACTACCACTCCCTCACTGGCGAGGGCAACTTCAACTGGCGCTACCTGTTCCCTT
CGACTACCTGGCGGGGAGGAGAAGATCGTCATCTCCAAGAAGGAGTCCATGTTCTCCTGGGACGAGACC
GAGTACAAGATCCCCGCGCGGCTCACCTGCAGATCTGGGATGCGGACCCTTCTCCGCTGACGACTTCC
TGGGGGCCATCGAGCTGGACCTGAACCGGTTCCCGCGGGGCGCAAAGACAGCCAAGCAGTGCACCATGGA
GATGGCCACCGGGGAGGTGGACGTGCCCTCGTGTCATCTTCAAGCAAAAGCGCTCAAAGGCTGGTGG
CCCCTCCTGGCCGCAATGAGAACGATGAGTTTGAGCTCACGGGCAAGGTGGAGGCTGAGCTGCATTAC
TGACAGCAGAGGAGGCAGAGAAGAACCAGTGGGCTGGCCGCAATGAACCTGACCCCTAGAGAAACC
CAACCGGCCCGACACGGCCTTCGTCTGGTTCCTCAACCCTCTCAAGTCCATCAAGTACCTCATCTGCACC
CGGTACAAGTGGCTCATCATCAAGATCGTGCTGGCGCTGTTGGGGCTGCTCATGTTGGGGCTCTTCTCT
ACAGCCTCCCTGGCTACATGGTCAAAAAGCTCCTTGGGGCATGA
    
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001287489
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:	<u>NM_001287489.1, NP_001274418.1</u>
RefSeq Size:	6973 bp
RefSeq ORF:	5994 bp
Locus ID:	9381
UniProt ID:	<u>Q9HC10</u>
Cytogenetics:	2p23.3
Protein Families:	Druggable Genome, Transmembrane

Gene Summary:

Mutations in this gene are a cause of neurosensory nonsyndromic recessive deafness, DFNB9. The short form of the encoded protein has 3 C2 domains, a single carboxy-terminal transmembrane domain found also in the *C. elegans* spermatogenesis factor FER-1 and human dysferlin, while the long form has 6 C2 domains. The homology suggests that this protein may be involved in vesicle membrane fusion. Several transcript variants encoding multiple isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (5) lacks an alternate in-frame exon in the 3' coding region and uses a downstream stop codon compared to variant 1. It encodes isoform e which has a distinct C-terminus compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.