

Product datasheet for **SC307597**

Otoferlin (OTOF) (NM_194322) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otoferlin (OTOF) (NM_194322) Human Untagged Clone
Tag:	Tag Free
Symbol:	Otoferlin
Synonyms:	AUNB1; DFNB6; DFNB9; FER1L2; NSRD9
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_194322, the custom clone sequence may differ by one or more nucleotides <pre> ATGATGACCGATACTCAGGATGGCCCTAGCGAGAGCTCCCAGATCATGAGGTCCCTCACT CCCCTGATCAACAGGGAGGAGGCATTTGGGGAGGCTGGGGAGGCGGGGCTGTGGCCAGC ATCACCCACACTCCTGATTCACAGGAAGAAGGCCTGAACGACATACAGGAGATGATCAAA ACGGAGAAGTCTACCTGAGCGTCGCCTGCGGGGCGTCTGGAGGAGCTGAGCTGTGGC TGCTGCCGCTTCTCTCCCTCGCTGACAAGGACCAGGGCCACTCATCCCGCACCAGGCTT GACCGGGAGCGCCTCAAGTCCTGCATGAGGGAGCTGGAACATGGGGCAGCAGGCCAGG ATGCTGCGGGCCAGGTGAAGCGGCACACGGTGCGGGACAAGCTGAGGCTGTGCCAGAAC TTCTGCGAGAAGTGCCTTCTGGCGGACGAGCCCCAGCACAGCATTCCCGACATCTTC ATCTGGATGATGAGCAACAACAAGCGTGTGCGCTATGCCCGTGTGCCCTCCAAGGACCTG CTCTTCTCCATCGTGGAGGAGGAGACTGGCAAGGACTGCGCCAAGGTCAAGACGCTCTTC CTTAAGCTGCCAGGGAAGCGGGGCTTCGGCTCGGCAGGCTGGACAGTGCAGGCCAAGGTG GAGCTGTACCTGTGGCTGGGCCTCAGCAACAGCGCAAGGAGTTCTGTGCGGCCTGCC TGTGGCTTCCAGGAGTCAAGGCAGCCAGGGCCTGGGCCTGCATGCCTTCCACCCGTC AGCCTGGTCTACACCAAGAAGCAGGCGTTCCAGTCCGAGCGCACATGTACCAGGCCCGC AGCCTCTTTGCCGCCGACAGCAGCGGACTCTCAGACCCCTTTGCCCGCTTCTTTCATC AATCAGAGTCAGTGCACAGAGGTGCTGAATGAGACCCTGTGTCCACCTGGGACCAGATG CTGGTGTTCGACAACCTGGAGCTCTATGGTGAAGCTCATGAGCTGAGGGACGATCCGCCC ATCATTGTCAATTGAAATCTATGACCAGGATTCCATGGGCAAAGCTGACTTCATGGCCGG ACCTTCGCCAAACCCCTGGTGAAGATGGCAGACGAGGCGTACTGCCACCCCGCTTCCCA CCTCAGCTCGAGTACTACCAGATCTACCGTGGCAACGCCACAGCTGGAGACCTGCTGGCG GCCTTCGAGCTGCTGCAGATTGGACCAGCAGGGAAGGCTGACCTGCCCCCATCAATGGC CCGGTGGACGTGGACCGAGGTCCCATCATGCCCGTGGCCATGGGCATCCGGCCCGTGCTC AGCAAGTACCGAGTGGAGGTGCTGTTCTGGGGCCTACGGGACCTAAAGCGGGTGAACCTG GCCAGGTGGACCGGCCACGGGTGGACATCGAGTGTGCAGGGAAGGGGTGCAAGTGTCC CTGATCCACAATTATAAGAAGAACCCCACTTCAACACCCCTCGTCAAGTGGTTTGAAGTG GACCTCCAGAGAACGAGCTGCTGCACCCGCCCTTGAACATCCGTGTGGTGGACTGCCGG GCCTTCGGTTCGTACACACTGGTGGGCTCCCATGCCGTGAGCTCCCTGCGACGCTTCATC TACCGGCCCCCAGACCGCTCGGCCCCAGCTGGAACACCACGGTCAGGCTTCTCCGGCGC TGCCGTGTGCTGTGAATGGGGGCTCCTCCTCACTCCACAGGGGAGGTTGTGGTGACT </pre>



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GTCAAGAAAATCCTCGGGGCCTGA

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Restriction Sites: Please inquire

ACCN: NM_194322

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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_194322.1](#), [NP_919303.1](#)

RefSeq Size: 5124 bp

RefSeq ORF: 3924 bp

Locus ID: 9381

UniProt ID: [Q9HC10](#)

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 (3) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (c, also called 'short form 2') has a shorter and distinct C-terminus compared to isoform a. 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.