

Product datasheet for **RG232987**

ODF2 (NM_001242354) Human Tagged ORF Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ODF2 (NM_001242354) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | ODF2 |
| Synonyms: | CT134; ODF2/1; ODF2/2; ODF84 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG232987 representing NM_001242354
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGGACCGCTCTTCAACTCCCCCTTACATGTTCACGTGGATGAGAACCACCCTGTCCACGTCCACA
 TAAAAAACTCCCGAAACCATCAGCGACCAGCAGCCAGAAATCTACAAGCGAGGAATGAAAGGGGACAC
 TGTGAATGTGCGGCGGAGTGTCCGGGTGAAAACCAAGGTCAAGATGCAAAAAGGTGAGCGCCAGATGGCC
 AAAAGTTCTGGAGAACGGAAGGAGCTGGAGGAGGTGGCCACGAACTGGCTGAGACTGAGCAGC
 AGAACACGGTGTGAGGCACAACATCGAGCGCATGAAGGAGGAGAAGGACTTCACCATACTTCAGAAGAA
 ACACCTACAACAGGAGAAGGAGTGCCTCATGTCCAAGCTGGTGGAGGCGGAAATGGATGGGGCTGCGGCT
 GCCAAGCAGGTGATGGCCTTGAAGGATACCATCGGGAAGCTGAAAACGGAGAAACAAATGACCTGCACGG
 ACATCAACACCCTGACAAGGCAGAAGGAACTTCTCCTGCAGAAGCTGAGCACATTTGAGGAGACCAACCG
 CACCCTCCGAGACCTCCTGAGGGAACAGCACTGCAAAGAGGATTCTGAAAGACTAATGGAGCAACAAGGA
 GCACTGCTGAAAACGGCTGGCGGAGGCCGACTCAGAGAAAAGCGCGCTGCTGTTACTGCTGCAAGACAAGG
 ACAAGGAGGTGGAAGAGCTCCTTCAGGAAATACAAATGTGAGAAGGCTCAAGCAAAGACAGCCTCTGAGCT
 TTCTAAATCCATGGAGTCCATGCGTGGGCATTTGCAGGCACAGCTTCGGTCCAAAGAGGCTGAGAACAGT
 CGCCTGTGCATGCAGATTAAGAACTGGAGCGCAGCGGGAATCAGCATAAGGCAGAAGTGGAGGCCATCA
 TGGAGCAGCTGAAGGAGTTGAAGCAGAAGGAGACCGAGACAAAGAGAGCTTGAAGAAGGCCATCCGAGC
 CCAGAAGGAGCGAGCCGAGAAGAGCGAGGAGTATGCTGAGCAGCTACACGTGCAACTCGCTGACAAGGAT
 CTTTATGTCGCTGAAGCTTTATCCACTCTGGAATCCTGGAGGAGCCGCTACAACCAAGTTGTAAGAGAAA
 AGGGAGACCTTGAGCTGGAATATTGTCTGAATGACCGGTAACAGATCTTGTAAACCAACAACAAC
 CCTGGAGGAGAAGATGCGGGAAGACCGGATAGCCTGGTGGAGAGACTACACCGTCAGACTGCTGAGTAT
 TCCGCATTCAAGCTGGAGAATGAGAGGCTGAAGGCCAGCTTTGCTCAATGGAGGACAAACTCAACCAGG
 CACACCTCGAGGTCCAGCAGCTGAAGGCCTCAGTGAAGAACTATGAGGGGATGATTGACAACTATAAGAG
 TCAGGTGATGAAGACCAGATTGGAGGCTGATGAAGTAGCTGCCAGCTAGAACGCTGTGACAAAGAGAAC
 AAGATCCTTAAAGATGAGATGAACAAAGAGATTGAGGCGGCACGAAGGCAGTTCCAGTCTCAGCTGGCTG
 ACCTGCAGCAGCTCCCTGACATCCTGAAGATCACGGAGGCGAAGCTGGCTGAGTGCCAAGACCAACTGCA
 GGGCTATGAGCGGAAGAACATCGACCTCACAGCCATCATATCAGACCTGCGCAGCCGGTAAAGGACTGG
 CAGAAAGGTTCCACGAACCTGACCCGAGCAGGGGCCCGCATACCAAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG232987 representing NM_001242354
 Red=Cloning site Green=Tags(s)

MKDRSSTPPLHVHDENTPVHVHIKLPKPSATSSQKSHKRMKGDTVNVRRSVRVKTKVKMQKGERQMA
 KRFLERKEELEEVAAHELAETEHEENTVLRHNIERMKEEKDFTILQKKHLQQEKECLMSKLVAAEMDGAAA
 AKQVMALKDTIGLKTQKMTCTDINTLTRQKELLLQKLSTFEETNRTLRLDLLREQHCKEDSERLMEQQG
 ALLKRLAEADSEKARLLLLLQDKDKEVEELLQEIQCEKAQAKTASELSKSMESMRGHLQAQLRSKEAENS
 RLCMQIKNLERSGNQHKAEEVAIMEQLKELKQKGDREKSLKKAIRAQKERAEEKSEYAEQLHVQLADKD
 LYVAEALSTLESWRSRYNQVVEKGDLELEIIVLNDRVTDLVNQQTLEEKMRDRDSLVERLHRQTAEY
 SAFKLENERLKASFAPMEDKLNQAHLEVVQQLKASVKNYEGMIDNYKSQVMKTRLEAEVAAQLERCDKEN
 KILKDEMNKEIEAARRQFQSQLADLQQLPDILKITEAKLAECQDQLQGYERKNIDLTAIISDLRSRVRDW
 QKGSHELTRAGARIPR

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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|-------------------------------|---|
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| 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: | <ol style="list-style-type: none">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_001242354.1 , NP_001229283.1 |
| RefSeq Size: | 2227 bp |
| RefSeq ORF: | 1731 bp |
| Locus ID: | 4957 |
| UniProt ID: | Q5BJF6 |
| Cytogenetics: | 9q34.11 |
| Gene Summary: | The outer dense fibers are cytoskeletal structures that surround the axoneme in the middle piece and principal piece of the sperm tail. The fibers function in maintaining the elastic structure and recoil of the sperm tail as well as in protecting the tail from shear forces during epididymal transport and ejaculation. Defects in the outer dense fibers lead to abnormal sperm morphology and infertility. This gene encodes one of the major outer dense fiber proteins. Alternative splicing results in multiple transcript variants. The longer transcripts, also known as 'Cenexins', encode proteins with a C-terminal extension that are differentially targeted to somatic centrioles and thought to be crucial for the formation of microtubule organizing centers. [provided by RefSeq, Oct 2010] |