

Product datasheet for **RC233148**

ODF2 (NM_001242353) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ODF2 (NM_001242353) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ODF2
Synonyms:	CT134; ODF2/1; ODF2/2; ODF84
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC233148 representing NM_001242353
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTGCCTCATCTCAGGCGGCTCCCCAGGTTCCATCGTGTGGGAAGAACGGAGTAACGAGTCTCA
 CGCAGAAAAAGGCTTTGAGAGCACCTTGTGGCGCACCCAGTGTAAGTGTGACGAAATCTCACAAGCGAGG
 AATGAAAAGGGGACACTGTGAATGTGCGGCGGAGTGTCCGGGTGAAAACCAAGGTACCTTGGATGCCCCCT
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 CTGTAATAAAGAACCGTTATGATAAGAAGATTGATAGTCTAATGAATGCGGTTGGTTGTCTGAAGTCTGAG
 GTCAAGATGCAAAAAGGTGAGCGCCAGATGGCCAAAAGGTTCTGGAGGAACGGAAGGAAGAGCTGGAGG
 AGGTGGCCACGAACTGGCTGAGACTGAGCAGCAGAACACGGTGTGAGGCACAACATCGAGCGCATGAA
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 GCTTTGCTCCAATGGAGGACAACTCAACCAGGCACACCTCGAGGTCCAGCAGTGAAGGCCCTCAGTGAA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233148 representing NM_001242353
 Red=Cloning site Green=Tags(s)

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MSASSSGSPRFPSCGKNGVTSLTQKKVLRAPCGAPSVTVTKSHKRGMKGDTVNVRRSVRVKTKVPWMP
GKSSARPVGCKWENPPHCLEITPPSSEKLVSMRLSDLSTEDDDSGHCCKMNRDCKIDSLMNAVGLKSE
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LVEAEMDGAAAAQVMALKDTIGKLTKEKQMTCTDINTLTRQKELLLQKLSFTEETNRTLRLDLREQHCK
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AQLRSKEAENSRLCMQIKNLSRSGNQHKAEVEAIMEQLKELKQKGDREKESLKKAIRAQKERAEEKSEEYA
EQLHVQLADKDLVYAEALSTLESWRSRYNQVVKEKGDLELEIIVLNDRVTDLVNQQTLEEKMRDRDSL
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AAQLERCCKENKILKDEMNKEIEAARRQFQSQLADLQQLPDILKITEAKLAECQDQLQGYERKNIDLTAI
ISDLRSRIEHQGDKLEMAREKHQASQKENKQLSLKVDELERKLEATSAQNIQFLQVIKREEAIHQSQLR
LEEKTRCGTLARQLESIAIEDARRQVEQTKHALSKERAAQNKILDLETQLSRKTELSQLRRSRDDADR
RYQSRLQDLKDRLEQSESTNRSMQNYVQFLKSSYANVFGDGPYSTFLTSSPIRSRPPA
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

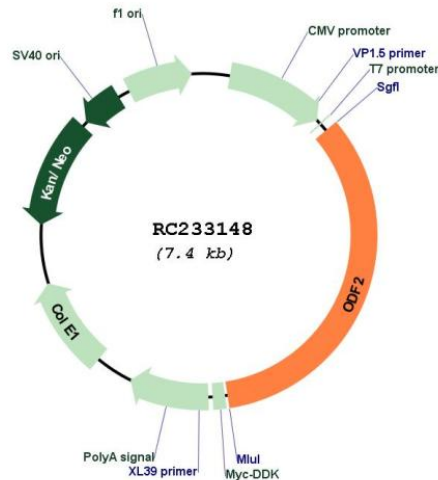
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001242353

ORF Size: 2487 bp

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:

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_001242353.1](#), [NP_001229282.1](#)

RefSeq Size: 3985 bp

RefSeq ORF: 2490 bp

Locus ID: 4957

UniProt ID: [Q5BJF6](#)

Cytogenetics: 9q34.11

MW: 95.9 kDa

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]