

## Product datasheet for **RC233044**

### ODF2 (NM\_153440) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ODF2 (NM_153440) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ODF2
Synonyms:	CT134; ODF2/1; ODF2/2; ODF84
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC233044 representing NM\_153440  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGCAGAAACCGGTACCTCCTGCTGCTGGTTCCATCGTGTGGGAAGAACGGAGTAACGAGTCTCA  
CGCAGAAAAAGGTCTTGAGAGCACCTTGTGGCGCACCCAGTGAACTGTGACGAAATCTCACAAGCGAGG  
AATGAAAAGGGGACACTGTGAATGTGCGGCGGAGTGTCCGGGTGAAAACCAAGAATCCACCTCATTGCCTG  
GAGATCACGCCACCATCTTCAGAAAAGCTGGTCTCAGTGATGCGGTTAAGTGACCTCTACAGAAGATG  
ATGACTCAGGTCAGTGTAAAATGAACCGTTATGATAAGAAGATTGATAGTCTAATGAATGCGGTTGGTTG  
TCTGAAGTCTGAGGTCAAGATGCAAAAAGGTGAGCGCCAGATGGCCAAAAGGTTCTGGAGGAACCGAAG  
GAAGAGCTGGAGGAGGTGGCCACGAACTGGCTGAGACTGAGCACGAGAACACGGTGTGGAGGCACAACA  
TCGAGCGCATGAAGGAGGAGAAGGACTTACCATACTTCAGAAGAAACACCTACAACAGGAGAAGGAGTG  
CCTCATGTCCAAGCTGGTGGAGGCGGAAATGGATGGGGCTGCGGCTGCCAAGCAGGTCATGGCCTTGAAG  
GATACCATCGGGAAGCTGAAAACGGAGAAAACAAATGACCTGCACGGACATCAACACCTGACAAGGCAGA  
AGGAACTTCTCCTGCAGAAGCTGAGCACATTTGAGGAGACCAACCGCACCTCCGAGACCTCCTGAGGGA  
ACAGCACTGCAAAGAGGATTCTGAAAGACTAATGGAGCAACAAGGAGCACTGCTGAAACGGCTGGCGGAG  
GCCGACTCAGAGAAAAGCGCGCCTGCTGTTACTGCTGCAAGACAAGGACAAGGAGGTGGAAGAGCTCCTTC  
AGGAAATACAATGTGAGAAGGCTCAAGCAAAGACAGCCTCTGAGCTTTCTAAATCCATGGAGTCCATGCG  
TGGGCAATTTGCAGGCACAGCTTCGGTCCAAGAGGCTGAGAACAGTCGCCTGTGCATGCAGATTAAGAAT  
CTGGAGCGCAGCGGGAATCAGCATAAAGGCAGAAGTGGAGGCCATCATGGAGCAGCTGAAGGAGTTGAAGC  
AGAAGGGAGACCGAGACAAAGAGAGCTTGAAGAAGGCCATCCGAGCCAGAAGGAGCGAGCCGAGAAGAG  
CGAGGAGTATGCTGAGCAGCTACACGTGCAACTCGCTGACAAGGATCTTTATGTCGCTGAAGCTTTATCC  
ACTCTGGAATCCTGGAGGAGCCGCTACAACCAAGTTGTAAGAAAAGGGAGACCTTGAGCTGGAATTA  
TTGTCCTGAATGACCGGTAACAGATCTTGTAAACCAACAACAACCTGGAGGAGAAGATGCGGGAAGA  
CCGGGATAGCCTGGTGGAGAGACTACACCGTCAGACTGCTGAGTATTCGCATTCAAGCTGGAGAATGAG  
AGGCTGAAGGCCAGCTTTGCTCCAATGGAGGACAACTCAACCAGGCACACCTCGAGGTCCAGCAGCTGA  
AGGCCTCAGTGAAGAATATGAGGGGATGATTGACAACTATAAGAGTCAGGTGATGAAGACCAGATTGGA  
GGCTGATGAAGTAGCTGCCAGCTAGAACGCTGTGACAAAAGAGAACAAGATCCTTAAAGATGAGATGAAC  
AAAGAGATTGAGGCGGCACGAAGGCAGTCCAGTCTCAGCTGGCTGACCTGCAGCAGCTCCCTGACATCC  
TGAAGATCACGGAGGCGAAGCTGGCTGAGTGCCAAGACCAACTGCAGGGCTATGAGCGGAAGAACATCGA  
CCTCACAGCCATCATATCAGACCTGCGCAGCCGGTAAGGGACTGGCAGAAAGGGTCCCACGAACTGACC  
CGAGCAGGGGCCCGCATACCAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC233044 representing NM\_153440  
Red=Cloning site Green=Tags(s)

MGRNRYPPACWFPSCGKNGVTSLTQKKVLRAPCGAPSVTVTKSHKRGMGDVTNVRRSVRVKTKNPPHCL  
 EITPPSSEKLVSMRSLSDLSTEDDDSGHCKMNRDYDKKIDSLMNAVGLKSEVKMQKGERQMAKRFLEERK  
 EEELEVAHELAE TEHENTVLRHNIERMKEEKDF TILQKKHLQEQECLMSKLVAEAMDGAAAQVMALK  
 DTIGKLTQKMTCTDINTLTRQKELLQKLSTFEETNRTLRLDLLREQHCKEDSERLMEQQGALLKRLAE  
 ADSEKARLLLLLQDKDKEVEELLQEIQCEKAQAKTASELSKSMESMRGHLQAQLRSKEAENSRLCMQIKN  
 LERSGNQHKAEVEAIMEQLKELKQKGDRLKESLKKAIRAQKERAEKSEEYAEQLHVQLADKDLVVAEALS  
 TLESWRSRYNQVVEKGDLELEIIVLNDRVTDLVNQQTLEEKMRDRDSLVERLHRQTAEYSAFKLENE  
 RLKASFAPMEDKLNQAHLEVQQLKASVKNYEGMIDNYKSQVMKTRLEADEVAAQLERC DKENKILKDEM  
 KEIEAARRQFQSQLADLQQLPDILKITEAKLAECQDQLQGYERKNIDLTAIISDLRSRVRDWQKGSHELT  
 RAGARIPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_153440

**ORF Size:** 1914 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\\_153440.1](#), [NP\\_702918.1](#)

**RefSeq Size:** 2171 bp

**RefSeq ORF:** 1917 bp

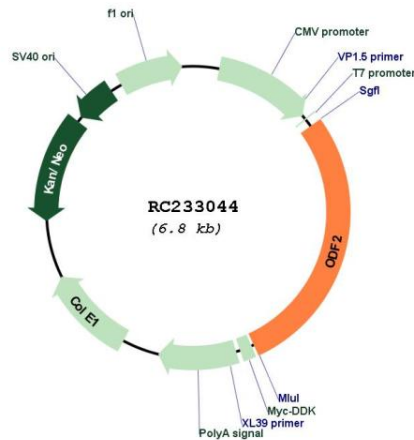
**Locus ID:** 4957

**Cytogenetics:** 9q34.11

**MW:** 74.1 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]

### Product images:



Circular map for RC233044