

Product datasheet for **RC231359**

ODF2 (NM_153436) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ODF2 (NM_153436) 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:

>RC231359 representing NM_153436
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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CATCTTCAGAAAAGCTGGTCTCAGTGTGCGGTTAAGTGACCTCTCTACAGAAGATGATGACTCAGGTCA
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GCTGCCAGCTAGAACGCTGTGACAAAGAGAACAAGATCCTTAAAGATGAGATGAACAAAGAGATTGAGG
CGGCACGAAGGCAGTTCCAGTCTCAGCTGGCTGACCTGCAGCAGCTCCCTGACATCCTGAAGATCACGGA
GGCGAAGCTGGCTGAGTGCCAAGACCAACTGCAGGGCTATGAGCGGAAGAACATCGACCTCACAGCCATC
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GCATACCAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231359 representing NM_153436
Red=Cloning site Green=Tags(s)

MADQQGPHQNRFPSCGKNGVTSLTQKKVLRAPCGAPSVTVTKSHKRGMGDVTNVRRSVRVKTKVPWMP
 GKSSARVPVCKWENPPHCLEITPPSSEKLVSMRLSDLSTEDDSDGHCKMNRDYDKIDSLMNAVGLKSE
 VKMQKGERQMAKRFLEERKEELEVAHELAEHENTVLRHNIERMKEEKDFTILQKKHLQQEKECLMSK
 LVEAEMDGAATAAKQVMALKDTIGKLTQKMTCTDINTLTRQKELLLQKLSTFEETNRTLRLDLREQHCK
 EDSERLMEQQGALLKRLAEADSEKARLLLLLQDKDKEVEELLQEIQCEKAQAKTASELSKSMESMRGHLQ
 AQLRSKEAENSRLCMQIKNLSRSGNQHKAQVEAIMEQLKELKQKGDREKESLKKAIRAQKERAEEKSEEYA
 EQLHVQLADKDLVYAEALSTLESWSRYNQVVKEKGDLELEIIVLNDRVTDLVNQQTLEEKMRDRDSL
 VERLHRQTAEYSAFKLENERLKASFAPMEDKLNQAHLEVQQLKASVKNYEGMIDNYKSQVMKTRLEADEV
 AAQLERCDDKENKILKDEMNKEIEAARRQFQSQLADLQQLPDILKITEAKLAECQDQLQGYERKNIDLTAI
 ISDLRSVRDQWQGSHELTRAGARIPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8071_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153436

ORF Size: 1971 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_153436.1](#), [NP_702914.1](#)

RefSeq ORF: 1974 bp

Locus ID: 4957

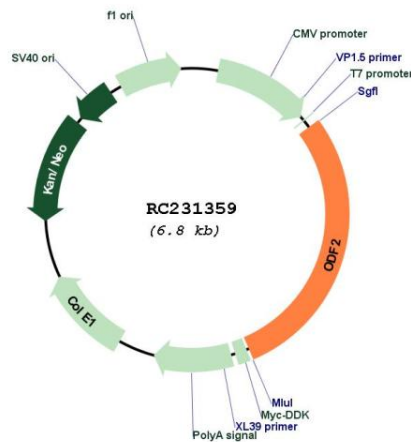
UniProt ID: [Q5BJF6](#)

Cytogenetics: 9q34.11

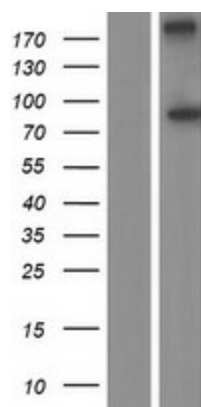
MW: 76.1 kDa

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 RC231359



Western blot validation of overexpression lysate (Cat# [LY434358]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231359 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).