

Product datasheet for **RG231356**

ODF2 (NM_153439) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ODF2 (NM_153439) 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:

>RG231356 representing NM_153439
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCGAGCTGCCGACCGGGTGTGCGAAAAGGAGGCGGAAGCGGGGAGGAGCCGCTGCCAGAGCCAGAC
 TGCATCCGCCGCGCGTCTCCATGGCACGACCCTGGCCTCCGACTTCAACGACTTATAAGGCGGGGTTT
 CTGGGCGCAGCCGTGTCGCTCCTGGTTTCCATCGTGTGGGAAGAACGGAGTAACGAGTCTCACGCAGAAA
 AAGGTCTTGAGAGCACCTTGTCGCGCACCCAGTGAAGTGTGACGAAATCTCACAGCGAGGAATGAAAAG
 GGGACACTGTGAATGTGCGGCGGAGTGTCCGGGTGAAAACCAAGAATCCACCTCATTGCCTGGAGATCAC
 GCCACCATCTTCAGAAAAGCTGGTCTCAGTGATGCGGTTAAGTGACCTCTCTACAGAAGATGATGACTCA
 GGTCACTGTAATAAAGACCGTTATGATAAGAAGATTGATAGTCTAATGAATGCGGTTGGTTGTCTGAAGT
 CTGAGGTCAAGATGCAAAAAGGTGAGCGCCAGATGGCCAAAAGGTTCTGGAGGAACGGAAGGAAGAGCT
 GGAGGAGTGGCCACGAACTGGCTGAGACTGAGCACGAGAACACGGTGTGAGGCACAACATCGAGCGC
 ATGAAGGAGGAGAAGGACTTCACCATACTTCAGAAGAAACACCTACAACAGGAGAAGGAGTGCCTCATGT
 CCAAGCTGGTGGAGGCGGAAATGGATGGGGCTGCGGCTGCCAAGCAGGTCATGGCCTTGAAGGATACCAT
 CGGGAAGCTGAAAACGGAGAAAACAAATGACCTGCACGGACATCAACACCCTGACAAGGCAGAAGGAACTT
 CTCCTGCAGAAGCTGAGCACATTTGAGGAGACCAACCGCACCTCCGAGACCTCTGAGGGAACAGCACT
 GCAAAGAGGATTTGAAAGACTAATGGAGCAACAAGGAGCACTGCTGAAACGGCTGGCGGAGGCCGACTC
 AGAGAAAGCGCGCTGCTGTTACTGTGCAAGACAAGGACAAGGAGGTGGAAGAGCTCCTCAGGAAATA
 CAATGTGAGAAGGCTCAAGCAAAGACAGCCTCTGAGCTTCTAATCCATGGAGTCCATGCGTGGGCATT
 TGCAGGCACAGCTTCGGTCCAAAGAGGCTGAGAACAGTCGCTGTGCATGCAGATTAAGAATCTGGAGCG
 CAGCGGGAAATCAGCATAAGGCAGAAGTGGAGGCCATCATGGAGCAGCTGAAGGAGTTGAAGCAGAAGGGA
 GACCGAGACAAAGAGAGCTTGAAGAAGGCCATCCGAGCCAGAAGGAGCGAGCCGAGAAGAGCGAGGAGT
 ATGCTGAGCAGCTACACGTGCAACTCGCTGACAAGGATCTTTATGTCGCTGAAGCTTTATCCACTCTGGA
 ATCCTGGAGGAGCCGCTACAACCAAGTTGTAAGAAAAGGGAGACCTTGAGCTGGAAATATTGTCCTG
 AATGACCGGGTAACAGATCTTGTAAACCAACAACAAACCTGGAGGAGAAGATGCGGGAAGACCGGGATA
 GCCTGGTGGAGAGACTACACCGTCACTGCTGAGTATCCGCATTCAAGCTGGAGAATGAGAGGCTGAA
 GGCCAGCTTTGCTCCAATGGAGGACAACTCAACCAGGCACACCTCGAGGTCCAGCAGCTGAAGGCCTCA
 GTGAAGAACTATGAGGGGATGATTGACAACTATAAGAGTCAGGTGATGAAGACCAGATTGGAGGCTGATG
 AAGTAGCTGCCAGCTAGAACGCTGTGACAAGAGAACAAGATCCTGAAGATCACGGAGGCGAAGCTGGC
 TGAGTGCCAAGACCAACTGCAGGGCTATGAGCGGAAGAACATCGACCTCACAGCCATCATATCAGACCTG
 CGCAGCCGGTAAGGGACTGGCAGAAAGGGTCCCACGAACTGACCCGAGCAGGGGCCCGCATACCAAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG231356 representing NM_153439
 Red=Cloning site Green=Tags(s)

MGELPTGCRKRRRKRGGAAARARLHPPRRLHGTTLASDFNDFIRRRFWAQPGRSWFPCGKNGVTSLSLTK
 KVLRAPCGAPSVTVTKSHKRGMKGDTVNVRRSVRVKTKNPPHCLEITPPSSEKLVSMRRLSDLSTEDDSD
 GHCKMNRDVKKIDSLMNAVGLKSEVKMQKGERQMAKRFLEERKEELEVAHELAE TEHENTVLRHNIER
 MKEEKDF TILQKKHLQKEKECLMSKLVAEEMDGA AAAKQVMALKDTIGLKT EKQMTCTDINTLTRQKEL
 LLQKLSTFEETNRTL RDLLREQHCKEDSERLMEQQGALLKRLAEADSEKARLLLLLQDKDKEVEELLQEI
 QCEKAQAKTASELSKSMESMRGHLQAQLRSKEAENSRLCMQIKNLERSGNQHKA EVEAIMEQLKELKQKG
 DRDKESLKKAIRAQKERA EKSEEYAEQLHVQLADKDL YVAEALSTLESWSRYNQVYKEKGDLELEIIVL
 NDRVTDLVNQQTLEEKMRDRDSLVERLHRQTAEYSAFKLENERL KASFAPMEDKLNQAHLEVQQLKAS
 VKNYEGMIDNYKSQVMKTRLEADEVA AQLERC DKENKILKITEAKLAECQDQLQGYERKNIDLTAIISDL
 RSRVRDQKGSHELTRAGARIPR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_153439

ORF Size: 1959 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_153439.1](#), [NP_702917.1](#)

RefSeq Size: 2157 bp

RefSeq ORF: 1962 bp

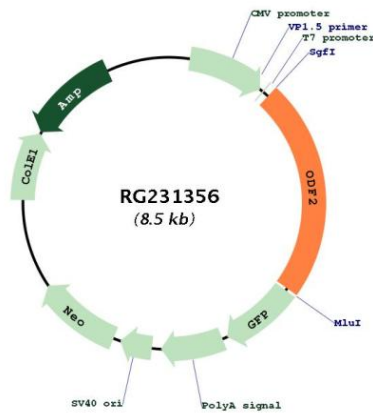
Locus ID: 4957

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]

Product images:



Circular map for RG231356