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Product datasheet for RG233145

ODF2 (NM_001242352) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ODF2 (NM_001242352) 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)

ORF Nucleotide Sequence:

>RG233145 representing NM_001242352
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGACCGCTCTTCAACTCCCCCCTTACATGTTCACGTGGATGAGAACACCCCTGTCCACGTCCACA
TAAAAAAACTCCCGAAACCATCAGCGACCAGCAGCCAGAAATCTCACAAGCGAGGAATGAAAGGGGACAC
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TGGTCTCAGTGATGCGGTTAAGTGACCTCTCTACAGAAGATGATGACTCAGGTCACTGTAAAATGAACCG
TTATGATAAGAAGATTGATAGTCTAATGAATGCGGTTGGTTGTCTGAAGTCTGAGGTCAAGATGCAAAAA
GGTGAGCGCCAGATGGCCAAAAGGTTCCTGGAGGAACGGAAGGAAGAGCTGGAGGAGGTGGCCCACGAAC
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CACCATACTTCAGAAGAAACACCTACAACAGGAGAAGGAGTGCCTCATGTCCAAGCTGGTGGAGGCGGAA
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ATTTGAGGAGACCAACCGCACCCTCCGAGACCTCCTGAGGGAACAGCACTGCAAAGAGGATTCTGAAAGA
CTAATGGAGCAACAAGGAGCACTGCTGAAACGGCTGGCGGAGGCCGACTCAGAGAAAGCGCGCCTGCTGT
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AGGACAAACTCAACCAGGCACACCTCGAGGTCCAGCAGCTGAAGGCCTCAGTGAAGAACTATGAGGGGAT
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CCAAGGAGCACGCACTCTCCAAGGAGCGAGCAGCCCAGAACAAAATCCTGGACCTTGAGACCCAGCTGAG
CAGAACCAAAACGGAATTGAGCCAGCTGCGGCGGAGCCGTGATGATGCGGACCGCCGCTACCAGAGCCGG
CTGCAAGACCTGAAAGATCGCCTGGAGCAGTCCGAGAGCACCAACCGCAGCATGCAGAACTACGTCCAGT
TCCTCAAATCATCATACGCCAACGTGTTTGGGGATGGTCCCTATTCCACCTTCCTGACTAGCTCTCCCAT
CCGCTCCCGATCTCCTCCTGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG233145 representing NM_001242352
Red=Cloning site Green=Tags(s)

MKDRSSTPPLHVHVDENTPVHVHIKKLPKPSATSSQKSHKRGMKGDTVNVRRSVRVKTKVPWMPPGKSSA
RPVGCKWENPPHCLEITPPSSEKLVSVMRLSDLSTEDDDSGHCKMNRYDKKIDSLMNAVGCLKSEVKMQK
GERQMAKRFLEERKEELEEVAHELAETEHENTVLRHNIERMKEEKDFTILQKKHLQQEKECLMSKLVEAE
MDGAAAAKQVMALKDTIGKLKTEKQMTCTDINTLTRQKELLLQKLSTFEETNRTLRDLLREQHCKEDSER
LMEQQGALLKRLAEADSEKARLLLLLQDKDKEVEELLQEIQCEKAQAKTASELSKSMESMRGHLQAQLRS
KEAENSRLCMQIKNLERSGNQHKAEVEAIMEQLKELKQKGDRDKESLKKAIRAQKERAEKSEEYAEQLHV
QLADKDLYVAEALSTLESWRSRYNQVVKEKGDLELEIIVLNDRVTDLVNQQQTLEEKMREDRDSLVERLH
RQTAEYSAFKLENERLKASFAPMEDKLNQAHLEVQQLKASVKNYEGMIDNYKSQVMKTRLEADEVAAQLE
RCDKENKILKDEMNKEIEAARRQFQSQLADLQQLPDILKITEAKLAECQDQLQGYERKNIDLTAIISDLR
SRIEHQGDKLEMAREKHQASQKENKQLSLKVDELERKLEATSAQNIEFLQVIAKREEAIHQSQLRLEEKT
RECGTLARQLESAIEDARRQVEQTKEHALSKERAAQNKILDLETQLSRTKTELSQLRRSRDDADRRYQSR
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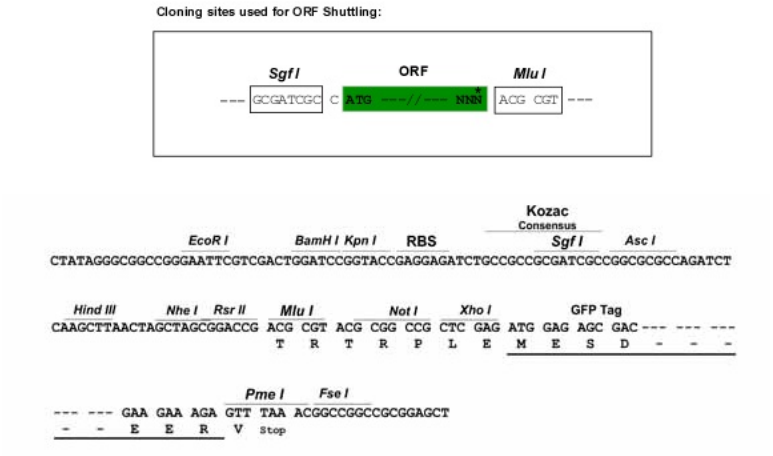
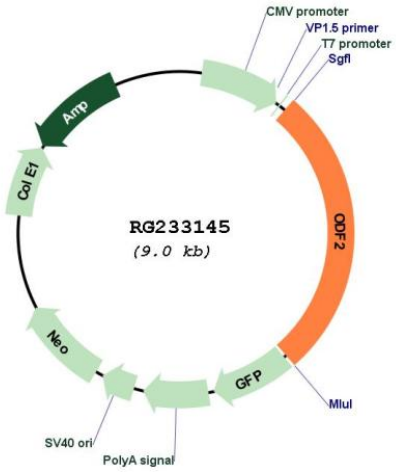
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001242352
ORF Size:	2472 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_001242352.1, NP_001229281.1
RefSeq Size:	3899 bp
RefSeq ORF:	2475 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]