

Product datasheet for **MG225128**

Ofd1 (NM_177429) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ofd1 (NM_177429) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ofd1
Synonyms:	Cxorf5; DXGgc7e; ORF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225128 representing NM_177429 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCAGTCCAACATGCCCCACAAGTCTGATGTGTTGAGTCAAGATGAACTGCGCAAAAAGCTATACC
AGACGTTAAAGGATCGGGGTGTACTGGACACACTTCAGACCCAACCCGAAACCAGCTAATTCATGAATT
GATGCATCCTGTATTGAGTGGAGAAGTGAAGCCGCATCCATTTTCAGTGGAGGGAGTGCCTCCTAATA
GGGCTTCTAACTCGCTGGTGGCAGACCCTTACAAGATGTGGCTATGAATATTCCTCTCTGTTTTCT
TTCCAGAAAGTGGTTTGGCAAAAGAAAAGATATTTACTATGCAGGATCTACTACAACCTATTCGGATTAA
CCCTCATCCAGTCTCTATAAATCATTGATTTTCAGGATTTGATAAAGAAAATAAAAAAGTTTTCTTATG
AGTTTTCTAAAGGAGTTGGCAGAATATTATCAAGCTAAAGAGAGCTGTGATGCGGAAACTCAGACAAGCA
CCACATTTCCAGCCAAGTGTCCCTAGCCGAGAAGTTTCAGCTTATTGACGCTCAATTTGCAGATGGTTT
TCCTCACCGTTCCAAGCTAGAATCTTTAGAGACAAAGTTAAACGAGTATAAGAAAGAAAGTACAACACCAG
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 GTTCTCCAGGATTTTCTCATGAAGAACCAGATGACATGTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225128 representing NM_177429
 Red=Cloning site Green=Tags(s)

MAQSNMPHKSDVLSQDELRRKLYQTFKDRGVLDLTLQTLRNQLIHELHPVLSGEVKKPPSISVEGSALLI
 GASNSLVADHLQRCGYEYSLSVFFPESGLAKEKIFTMQDLLQLIRINPSSSLYKSLISGFDKENKKGFLM
 SFLKELAEYYQAKESCD AETQTSTTFPSQVSLAEKFLIDAQFADGFPHRSKLESLETKLNEYKKEVQHQ
 LQVEMCHKLYFREAEITKVMEERRKYEKELAEFQNEFERTCQAKNEALISQEKNSLERIKKHREMESK
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 KAMELEHKDFETHRQALEKQLQSEIENSAQLRTQIAEYDASVKRLTVQVAELKSQKQTQIALENEVYRN
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 STKAKVRELEQEAERLEKAFRTYYQRATQNPSTSPQPAKSPPSVNSVAALRSIASSSMDRPVSAEDRVVS
 EQPLGDMLEEMSDMSKAFMGSVVSRPRRTSSSTRLSSTPHPKSRRSLDNEMYLEGLGRLHMTSSSPLLD
 RVSASPAASPPCPERTAQASPVPSRHSFSGLPEQNAQLYQRQTETQDKSEL SNVDKQSLKDEKFEPPFR
 WNKTEQFEAEGLHPAGDMPGIDFAVATQSSRLISYDYPASAVQSQTGEQDEQELWELHMKERRQREEQRHN
 ERQEALERERRELGKLEQERRMIEESLKMEEEELEKSVQDQDKSAHCENTLEKYMKIIQQRQEESSNAD
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TRTRPLE - GFP Tag - V

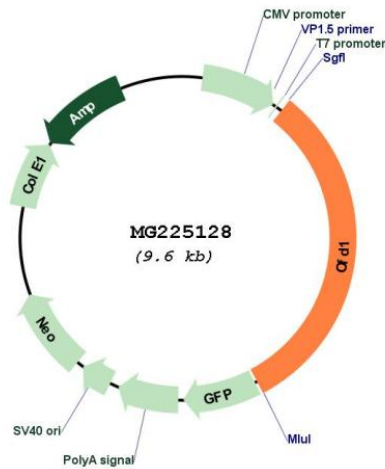
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_177429

ORF Size: 3057 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:	<ol style="list-style-type: none">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_177429.2
RefSeq Size:	4453 bp
RefSeq ORF:	3060 bp
Locus ID:	237222
UniProt ID:	Q80Z25
Cytogenetics:	X 77.28 cM
Gene Summary:	Component of the centrioles controlling mother and daughter centrioles length. Recruits to the centriole IFT88 and centriole distal appendage-specific proteins including CEP164. Involved in the biogenesis of the cilium, a centriole-associated function. The cilium is a cell surface projection found in many vertebrate cells required to transduce signals important for development and tissue homeostasis. Plays an important role in development by regulating Wnt signaling and the specification of the left-right axis. Only OFD1 localized at the centriolar satellites is removed by autophagy, which is an important step in the ciliogenesis regulation. [UniProtKB/Swiss-Prot Function]