

Product datasheet for **MG224989**

Gtf2ird1 (NM_001081469) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gtf2ird1 (NM_001081469) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gtf2ird1
Synonyms:	1700012P16Rik; BEN; Cream1; ESTM9; Gtf2il; GTF3; MustRD1; Tg(Alb1-Myc)166.8Sst; WBSCR11; X83320
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG224989 representing NM_001081469
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCTTGTGGGAAGCACTGTGACATCCCCACCAACGGCTGTGGGTCTGAGCGCTGGAACCTCCACCT
 TCGCCCGCAAGGACGAACCTCATCAACAGTCTGGTGTCCGCCTTAGACTCCATGTGCTCGGCCTCTCCAA
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 AGGGTGTTTCTGAACACTCGGAAGGAGCTACAGTCAAGTCTCAGGTTCTGCCGGGACCCCTGTGGA
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 CTCTCTGGAGCAGTGTGCGATGTGTACCTGCTGCAGAAGATGGTAGAGGAAGTGTGATGTTCTTTAT
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 CGCAAGAGAAAGAGGGTCTCTGAAGGCAACTCAGTCTCCTTCTTCTCTCTCTCTCTCTCTCTCTCTCTA
 ACCCAGAGTCTGTGGCATCCACCAACCAGATCTCCCTCGTGCAGTGGCCAGTGTACATGGTGGACTATTC
 CGGACTAAACGTGCAGCTTCCGGCCCCCTTGATTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224989 representing NM_001081469
 Red=Cloning site Green=Tags(s)

MALLGKHCDIPTNGCGSERWNSTFARKDELINSLVSALDSMCSALSKLNTEVACVAVHNESVFMGTEKG
 RVFLNTRKELQSDFLRFRCRGLWNDPEAGHPKKVQRCEGGGRSLPRSSLEQCSDVYLLQKMVEEVFDVLY
 SEAMGRATVVPLPYERLLREPLLAVQGLPEGLAFRRPAEYDPKALMAILEHSHRIRFKLRRPPDDGGQD
 TKALVEMNGISLLPKGSRDCGLHGQASKVAPQDLTPTATPSSMANFLYSTMPNHTIRELKQEVPTCPLT
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 NSIQFVIKRPELLTDGVKEPVLDTQERDSWDRLVDETPKRQGLQENYNTRL SRIDIANTLREQVQDLFNK
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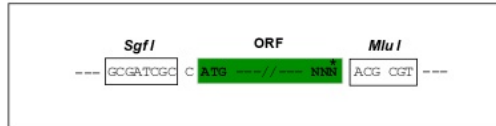
TRTRPLE - GFP Tag - V

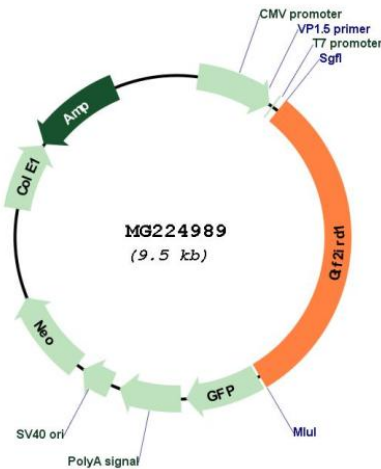
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_001081469

ORF Size: 2907 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_001081469.2](#), [NP_001074938.1](#)

RefSeq Size: 3304 bp

RefSeq ORF: 2910 bp

Locus ID: 57080

UniProt ID: [Q9JI57](#)

Cytogenetics: 5 74.55 cM

Gene Summary:

May be a transcription regulator involved in cell-cycle progression and skeletal muscle differentiation. May repress GTF2I transcriptional functions, by preventing its nuclear residency, or by inhibiting its transcriptional activation. May contribute to slow-twitch fiber type specificity during myogenesis and in regenerating muscles. Binds troponin I slow-muscle fiber enhancer (USE B1). Binds specifically and with high affinity to the EFG sequences derived from the early enhancer of HOXC8.[UniProtKB/Swiss-Prot Function]