

Product datasheet for **MG227196**

Gfi1 (NM_010278) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gfi1 (NM_010278) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gfi1
Synonyms:	AW495828; Gfi-1; Pal-1; Pal1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227196 representing NM_010278 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGCGCTCATTCTGGTCAAGAGCAAGAAGGCGCACAGCTATCACCAGCCGGTTCTCCGGGGCCGG
ACTACTCCCTGCGCCTGGAGACCGTGCCGCGCCGGCAGAGCAGAGGGCGCGCTGTGAGTGCAGGCGA
GTCGAAAATGGAGCCCCGAGAGCGTTTGTCCCGACTCTCAGCTTACCGAGGCTCCCGACAGGGCCTCC
GCGTCCCCAACAGCTGCGAAGGCAGCGTTTGTGACCCCTGCTCCGAGTTCGAGGACTTTTGAGGCCCC
CTTCTCCCTCCGTGTCTCCAGCGTCGGAGAAGTCACTGTGCCGCTCTCTGGACGAAGCCAGCCCTACAC
GCTGCCTTTCAAGCCCTATGCATGGAGCGGTCTTGCTGGGTCTGACCTGCGGCACCTGGTGCAGAGCTAT
CGGCAGTGCAGCGCGCTGGAGCGCAGCGCGGGCCTGAGCCTCTTCTGCGAGCGCGCTCGGAGCCGGCC
GCCCGGCAGCGCGCTACGGCCCCGAGCAGGCTGCGGGCGGAGCCGGTGCGGGACAGCCAGGGAGCTGCGG
GGTCGCGGGGGCGCCACCAGCGCTGCGGGCCTGGGGCTACGGCGACTTCGCGCTGCGGCGGGCGGG
CTGTACGAGCGGCGCAGCACAGCAGCAGGCGGCTGTACCAAGATCATGGCCACGAGCTGCACGCGGACA
AGAGCGTGGGCGTCAAGGTGGAGTCGGAGCTGCTTGCACCCGTCTGCTGCTGGCGGGCGGCTCTACAA
ATGCATCAAATGCAGCAAGGTGTTCTCCACACCGCACGGGCTGGAGGTGCACGTGCGCCGGTCCCACAGC
GGCACAAGACCCTTTGGCTGCGAGATGTGCGGCAAGACCTTCGGGCACCGGTTGAGCCTGGAGCAACACA
AGGCAGTGCACCTCCAGGAACGCAGCTTTGACTGTAAGATCTGTGGCAAGAGCTTCAAGAGGTCAATCCAC
GCTGTCCACACATCTGCTCATTCACTCGGACACCCGGCCCTATCCCTGTAGTACTGTGGCAAAAGATTC
CACCAGAAGTCAGATATGAAGAAACACACCTTTCATCCACACAGGTGAGAAGCCCCACAAATGCCAGGTGT
GCGGCAAAGCCTTCAGTCAGAGCTCCAACCTCATCACTCATAGCAGAAAGCACACAGGCTTCAAGCCCTT
TGGCTGTGACCTGTGTGGGAAGGGCTTCCAGAGGAAGGTGGATCTCAGGAGGCACCGAGAGACTCAGCAT
GGACTCAA

ACGCGTACGCGGCGGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG227196 representing NM_010278
Red=Cloning site Green=Tags(s)

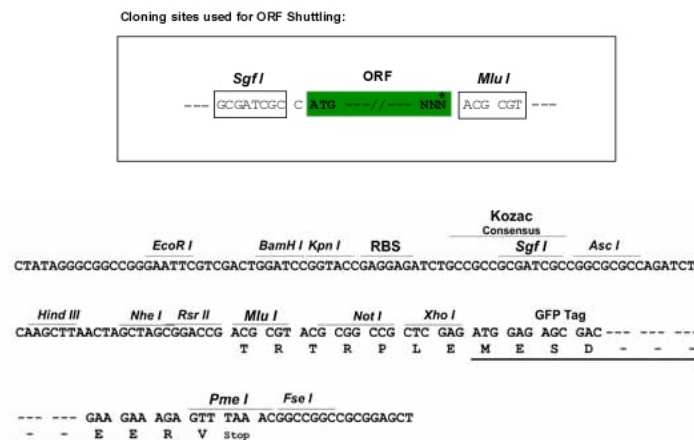
MPRSFLVKSCKAHSYHQPRSPGPDYSLRLETVPAPGRAEGGAVSAGESKMEPRERLSPDSQLTEAPDRAS
 ASPNSCEGSVCDPCSEFEDEFWRPPSPSVSPASEKSLCRSLDEAQPYTLFPFKPYAWSGLAGSDLRHLVQSY
 RQCSALERSAGLSLFCERGSEPRPAARYGPEQAAGGAGAGQPGSCGVAGGATSAAGLGLYGDFAPAAAG
 LYERPSTAAGRLYQDHGHELHADKSVGKVESELLCTRLLGGGSYKCIKCSKVFSTPHGLEVHVRSHS
 GTRPFACEMCGKTFGHAVSLEQHKAVHSQERSFDCKICGKSFKRSSTLSTHLLIHSDDTRPYPCQYCGKRF
 HQKSDMKKHTFIHTGEKPHKCQVCGKAFSQSSNLIHRSRKHGTGKPFGCDLGGKGFQRKVDLRRHRETQH
 GLK

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_010278

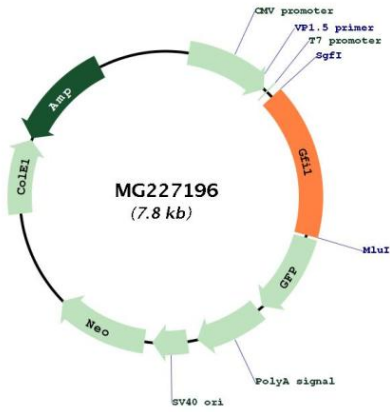
ORF Size: 1269 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_010278.2 , NP_034408.1
RefSeq Size:	2862 bp
RefSeq ORF:	1272 bp
Locus ID:	14581
UniProt ID:	P70338
Cytogenetics:	5 52.23 cM
Gene Summary:	Transcription repressor essential for hematopoiesis. Functions in a cell-context and development-specific manner. Binds to 5'-TAAATCAC[AT]GCA-3' in the promoter region of a large number of genes. Component of several complexes, including the EHMT2-GFI1-HDAC1, AJUBA-GFI1-HDAC1 and RCOR-GFI-KDM1A-HDAC complexes, that suppress, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Regulates neutrophil differentiation, promotes proliferation of lymphoid cells, and is required for granulocyte development. Mediates, together with U2AF1L4, the alternative splicing of CD45 and controls T-cell receptor signaling. Regulates the endotoxin-mediated Toll-like receptor (TLR) inflammatory response by antagonizing RELA. Cooperates with CBFA2T2 to regulate ITGB1-dependent neurite growth. Controls cell-cycle progression by repressing CDKNIA/p21 transcription in response to TGFB1 via recruitment of GFI1 by ZBTB17 to the CDKNIA/p21 and CDKNIB promoters. Required for the maintenance of inner ear hair cells.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227196