

Product datasheet for **MG207677**

Klf10 (NM_013692) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klf10 (NM_013692) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Klf10
Synonyms:	AI115143; Egral; EGR[a]; Gdnfif; mGIF; Tieg; TIEG-1; Tieg1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207677 representing NM_013692
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTCAACTTCGGCGCTTCTCTCCAGCAAGCTTCGGAGGGGAAAATGGAACATAATTTCTGAAAAGCCCA
 GAGAGGGGATGCATCCCTGGGACAAAGCTGAGCAGAGTACTTTGAAGCGGTGGAAGCGCTCATGTCCAT
 GAGCTGCGACTGGAAGTCTCATTCAAGAAATACCTTGAAAACAGGCCTGTCACACCAGTGTCTGATACC
 TCCGAGGATGACAGCTTCTCCAGGGACGCTGACCTTCAGACAGTCCCAGCATTTTGTAAACGCCAC
 CTTACAGCCCCTGACTTCGAACCCTCCCAAGGGTCAAATCTGACTGCATCAGCGCCATCTACTGGCCA
 CTTCAAATCTTTCTCGATGCTGCCAAGCTCCAGGCGCCACTCCTTTCAAAGAGGAGGAAAAGAATCCT
 TTAGCTGCCCTCCTCTCCTAAGGCTCAAGCCACCAGTGCATCCGTACACAGCTGATGCCAACTGT
 GCAACCACCAGTCTGCCCGTGAAGCAGCTAGCATCCTCAACTATCAGGACAATCTTTCCGGAGAAG
 AACCCACGAAAATGTTGAGGCTACTCGAAAGAACATACCTGTGTGCAGTGTACCAAACAGATCCAAG
 CCTGAGCCAGCACAGTGTCCGATGGTGTGAGAAAGGCGGGCGCTGCACTATATGACTTTGCTGTGCCTT
 CCTCAGAGACAGTAATTTGTAGGTCTCAGCCAGCTCCTTCGTCCCAGTGCAGAAGTCACTACTGGTGT
 TTCACCTACAGTATCCACTGGGGAGTGCCACCCTGCCTGTCTGCCAGATGGTTCCCTTCTCTGCC
 AACAACTCTTTGTTAGCACAGTTGTCCCAGCACTCCTCCTAGCCAGCCACCAGTGTCTGCTCACCTG
 TGTTGTTTATGGGCACTCAGGTGCCTGAGGGCACCGTCTGTTTGTGGTACCCAGCCCGTTGTGCAGAG
 CCCAAGGCCTCCAGTGGTGAAGCCAGTGGCACCAGACTGTCTCCATTGCCCTGCTCCTGGATTCTCT
 CCTTCAGCAGCAAGGGTCACTCCTCAGATTGACTCGTCCAGAGTAAGAAGTACATCTGTAGCCACCAG
 GGTGTGGCAAGACTTACTTTAAAAGTTCATCTGAAGGCCACGTGAGGACACACAGGGGAAAACC
 TTTGAGTGCAGCTGGAAGGCTGTGAAAGGAGTTTGTCTCGCTCCGATGAACTGTCCAGACACCGGCGG
 ACACACACAGGTGAGAAGAAGTTTGCCTGTCCATGTGTGACCGTCTGTTTATGAGGAGCGACATTAA
 CCAAGCATGCCCGACGCCACCTATCAGCCAAGAAGCTGCCAAACTGGCAAATGGAAGTTAGCAAGTTAA
 TGACATTGCTCTGCCTCCGACCCTGCTCCGCACAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207677 representing NM_013692
 Red=Cloning site Green=Tags(s)

MLNFGASLQQASEGKMEIIESEKPREGMHPWDKAEQSDFEAVEALMSMSCDWKSHFKKYLENRPVTPVSDT
 SEDDSLPLGTPDLQTVPAFCLTPPYSPDFEPSQGSNL TASAPSTGHFKFS SDAAKPPGATPFKEEEKNP
 LAAPPLPKAQATSVIRHTADAQLCNHQSCPVKAASILNYQDNSFRRRRTHGNVEATRKNIPCAAVSPNRSK
 PEPSTVSDGDEKAGAALYDFAVPSSETVICRSQPAPSSPVQKSVLVSSPTVSTGGVPLPVICQMVPLPA
 NNSLVSTVVPSTPPSQPPAVCSPVLFMGTQVPEGTVVFVVPQPVVQSPRPPVSPSGTRLSPVAPAGFS
 PSAARVTPQIDSSRVRSHICSHPGCGKTYFKSSHLKAHVRTHTGEKPFSCSWKGCERRFARSDEL SRHRR
 THTGEKKFACPMCDRRFMRSDDLTKHARRHLSAKKLPNWQMEVSKLNDIALPPTPASAQ

TRTRPLE – GFP Tag – V

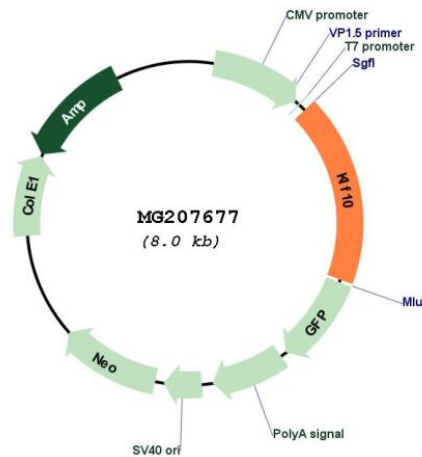
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_013692

ORF Size: 1437 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_013692.3](#)

RefSeq Size: 3045 bp

RefSeq ORF: 1440 bp

Locus ID: 21847

UniProt ID: [O89091](#)

Cytogenetics: 15 B3.1

Gene Summary: Transcriptional repressor which binds to the consensus sequence 5'-GGTGTG-3'. May play a role in the cell cycle regulation (By similarity). Plays a role in the regulation of the circadian clock; binds to the GC box sequence in the promoter of the core clock component ARTNL/BMAL1 and represses its transcriptional activity. Regulates the circadian expression of genes involved in lipogenesis, gluconeogenesis, and glycolysis in the liver. Represses the expression of PCK2, a rate-limiting step enzyme of gluconeogenesis.[UniProtKB/Swiss-Prot Function]