

Product datasheet for **MG226854**

Klf4 (NM_010637) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klf4 (NM_010637) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Klf4
Synonyms:	EZF; Gklf; Zie
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226854 representing NM_010637
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGTCAGCGACGCTCTGCTCCCGTCTTCTCCACGTTTCGCGTCCGGCCCGGCCGGAAGGGAGAAGA
 CACTGCGTCCAGCAGGTGCCCGACTAACCCTGGCGTGAGGAACTCTCTCACATGAAGCGACTTCCCC
 ACTTCCCGGCCGCCCTACGACCTGGCGCGACGGTGGCCACAGACCTGGAGAGTGGCGGAGCTGGTGCA
 GCTTGCAGCAGTAACAACCCGGCCCTCCTAGCCCGGAGGGAGACCAGGAGTTCAACGACCTCTGGACC
 TAGACTTTATCCTTTCCAACCTCGCTAACCCACCAGGAATCGGTGGCCGCCACCGTGACCCTCGGCGTC
 AGCTTCATCCTCGTCTTCCCGAGCGAGCAGCGCCCTGCCAGCGCGCCCTCCACCTGCAGCTTCAGCTAT
 CCGATCCGGGCCGGGGTGACCCGGCGTGGTCCAGCAACACAGGTGGAGGGCTCTCTACAGCCGAG
 AATCTGCGCCACCTCCACGGCCCTTCAACCTGGCGGACATCAATGACGTGAGCCCTCGGGCGGCTT
 CGTGGCTGAGCTCTGCGCCGGAGTTGGACCCAGTATACATTCCGCCACAGCAGCTCAGCCGCCAGGT
 GCGGGCTGATGGCAAGTTTGTCTGAAGCGTCTCTGACCACCCTGGCAGCGAGTACAGCAGCCCTT
 CGGTATCAGTGTAGCAAAGGAAGCCAGACGGCAGCCACCCCGTGGTGTAGTGGCGCCCTACAGCGGTGG
 CCCGCCGCGCATGTGCCCAAGATTAAGCAAGAGGCGGTCCCGTCTGCACGGTCAAGCCGGTCCCTAGAG
 GCCATTTGAGCGCTGGACCCAGCTCAGCAACGGCCACCGGCCAACACACAGACTTCCCCCTGGGGC
 GGCAGTCCCCACCAGGACTACCCTACACTGAGTCCCGAGGAACTGCTGAACAGCAGGGACTGTACCC
 TGGCCTGCCTCTCCCCAGGATTCATCCCCATCCGGGGCCAACTACCTCCTTCTGCCAGACCAG
 ATGCAGTCACAAGTCCCCTCTCTCCATTATCAAGAGTCTATGCCACCGGGTCTGCCTGCCAGAGGAGC
 CCAAGCCAAAGAGGGGAAGAAGGTCGTGGCCCGGAAAAGAAGCCACCCACACTTGTGACTATGCAGG
 CTGTGGCAAACCTATACCAAGAGTTCTCATCTCAAGGCACACCTGCGAACTCACACAGGGCAGAAACCT
 TACCAGTGTGACTGGGACGGCTGTGGGTGAAATTCGCCCGCTCGGATGAACTGACCAGGCACTACCGCA
 AACACACAGGGCACCGGCCCTTTCAGTGCCAGAAGTGCAGACGGCCCTTTCAGGTGCGACCACCTTGC
 CTTACACATGAAGAGGCACTTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG226854 representing NM_010637
 Red=Cloning site Green=Tags(s)

MAVSDALLPSFSTFASGPAGREKTLRPAGAPTNRWREELSHMKRLPPLPGRPYDLAATVATDLESGGAGA
 ACSSNNPALLARRETEEFNDLLDLDLILSNLTHQESVAATVTTASASSSSSPASSGPASAPSTCSFSY
 PIRAGDPPGVAASNTGGGLLYSRESAPPPTAPFNLADINDVSPSGGFVAELLRPELDPVYIPPQQPPG
 GGLMGKFLKASLTPGSEYSSPSVISVSKGSPDGSHPVVVPYSGGPPRMCPKIKQEAVPSCTVSRSL
 AHL SAGPQLSNGHRPNTHDFPLGRQLPTRITPTLSPEELLNSRDCHPGLPLPPGFHHPGPNYPFLPDQ
 MQSQVPSLHYQELMPPGSCLPEEPKPKRGRRSWPRKRTATHTCDYAGCGKTYTKSSHLKAHLRHTGKPK
 YHCDWDGCGWKFARSDDELTRHYRKHTGHRPFQCQKCDRAF SRSDHLALHMKRHF

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_010637

ORF Size: 1422 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.

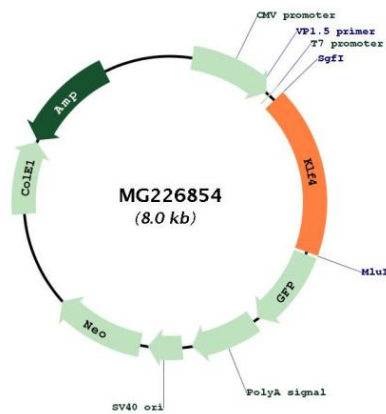
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
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_010637.3, NP_034767.2](#)
RefSeq Size: 3057 bp
RefSeq ORF: 1452 bp
Locus ID: 16600
UniProt ID: [Q60793](#)
Cytogenetics: 4 29.76 cM

Gene Summary: Transcription factor; can act both as activator and as repressor. Binds the 5'-CACCC-3' core sequence. Binds to the promoter region of its own gene and can activate its own transcription. Regulates the expression of key transcription factors during embryonic development. Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation. Required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. Involved in the differentiation of epithelial cells and may also function in skeletal and kidney development. Contributes to the down-regulation of p53/TP53 transcription (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226854