

Product datasheet for **MG217932**

Elf4 (NM_019680) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Elf4 (NM_019680) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Elf4
Synonyms:	AV314029; BC042423; ENSMUSG00000053512; Gm9907; Mef
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG217932 representing NM_019680
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGCTATTGCTCTGCAGCCAGTGATCTGGTCTTCGAGTTTGAAGCAACGGGATGGATGATATCCACC
AGCTGGAAGACCCCTTCAGTGTTCCAGCCGTGATCGTGGAACAGGTCCCCATCCTGAATTAGTGCATCT
GTGCTCAGGACTGGATCTGGATGAGGTCCACAATGGCATTACATAAGGGACAGGACCTTGTGCATGACACAG
GATCAGATTTTAGAAGGCAGTATTTGCTGACAGATGATGATGTATCCACCTCAAATAACGTGTCATCCA
CTGAAGTCCTATTCAATGTGGCAACTCCCAGTGATGTCCTGGATGAGAAGCAGATCTTCAGCTCACCCGGA
AGTGCTTTTCAGACTCCAACCTCTGTTTCAGGCCATCAATCTACCCAACCTCCTGCTCTTACCCTGAACT
GATGACCTGAAGAAGACAAGTGATGCTGGTGACCAGAAGGAGCATTCTGAGGAGGAGAAGGTCTCCAGAG
AGGAAAATCTTAGGAAGATGGGAAGGCACGGAAGAGAAAACCGAAAGACCAAGAACAACCCGAAGTACCTC
ACCTGTCACTGACCCTAGCATGCCTATACGGAAGAAAATCAAAGATGGCAAAGGCAGCACCATTTATCTG
TGGGAGTTCCTCCTGGCTCTTCTGCAAGACAGAAAACCTGCCCAAGTACATTAAGTGGACGCAGAGAG
AGAAGGGCATCTTCAAGTTGGTGGACTCCAAGGCTGTGTCCAAGCTGTGGGGCAAGCAGAAAAACAACCC
TGACATGAACTACGAGACCATGGGGCGAGCCCTGAGATATTATTCAAAGAGGAATCCTGGCCAAAGTG
GAAGGGCAGAGGCTGGTATACCAGTTCAAGGAGATGCCTAAGGACTTGGTGGTGATTGATGATGAAGAAG
AGAGCCCTGAGACACCAGAAGACTCTTCCCAGGCCCTCGACTTCTCCACACCCTCGACCAGTACCATCCG
GAGAGCCAGCTCCAGGGTCGGAACCAGAGCCTCCCCGAGGACAAGGATATCCCTCCCTGGGAGAAGCCA
AAAGTCCAACACACTGGTCTCCAGCCATCTGCAAGCCTGGAGTTAGGATTGTCTGTGGATGAGGAGGTTT
CCACCACCTCCACCATGCTTCCAGCCACTACAGAGCCAGGCCAGGCTCACAAAACCTGTGAGTTCTTC
TCCAGCACCCAGTAACATCCACCTAGGAGTAGCCCTGTGGGGCCTGGCTCCACTGTCCCTGCAGACC
ATCCCCTGACTACGGTCTGACCAATGGGCTCCTGCCAGTACTACTGCTCCAACCTCAACTCGTTCTTC
AGAGTGTCCCGCAGGTGTCAACATTCAAGGACACCTTCACTTTGCAGACCTCCTTCCCCCTGAACACCAA
TTTGCAAGAGAACCAGGTGGCAACCCAAGGGGCCCACTGATCCTCAGTGGTCTCCCCCAACTTCTGGCT
GGGGCCAACCCCTCAGAGCAACCCAGCTCCATCCCAGGTCATAGGTGCTGGGTGAGCAGGGCCTAGCTCTC
AGCCCCCTGGGACTGTGATTGCTGCCTTATCAGGACTCCAGTGGCACATCAGTGCCTGTGGTAAAGGA
GGGGCCCTTGGGTCCTTTCATATGTGCAGGGTGTGGTACTGGGGCACCCGTGGAGGGGCTGTTGGTT
CCTGAAGAGACCCTGAGAGACTCCTGAGAGATCAGGGTCATCTCAGCCACTTCCGAGTCAGGTGCTCT
CAAGGGGTTCCCATAACCTGAGCCTTGTGGGAACCAGACTCTCTCCCCCTAGCCACCCCACTGTTGG
GCTAACCCAGTGGCTGAGCTCGAGCTCTCGTCAGGCTCAGGGCCCTGTTCTGTAAGTGAAGCCTAGTGTG
ACCAGATCCCCAACCCAGGCCCTTTCTCCCCATTCAATCCCCTTCCCTCATTAAAGATGGAACCCCAAG
ATATA

ACCGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG217932 representing NM_019680
 Red=Cloning site Green=Tags(s)

MAIALQPSDLVFEFASNGMDDIHQLEDPSVFPVIVEQVPYPELVHLC SGLDLDEVHNGIIRDRTL CMTQ
 DQILEGSILLTDDDVSTSNVSSTEVLFNVATPSDVLDEKQIFSSPEVLSDSNSVQAINLPNLLSTPEP
 DDLKKTSDAGDQKEHSEEEKVSRLENLRKMGKARKRNRKTKNNRSTSPVTDPSMPIRKSKDGKSTIYL
 WEFLLALLQDRNTCPKYIKWTQREKGIKLVDSKAVSKLWGKQKNKPMNYETMGRALRYYYQRGILAKV
 EGQRLVYQFKEMPKDLVVIDDEEESPETPEDSSQASTSSTPSTSTIRRASSRVGTRASPEDKDIPPWEKP
 KVQHTGLQPSASLELGLSVDEEVPTTSTMLASPLQSQARLTKTVSSSPAPSNIHLGVAPVPGSTVTLQT
 IPLTTVL TNGPPASTTAPTQLVLQSV PQVSTFKDTFTLQTSFPLNTNLQENQVATQGAPLILSGLPQLLA
 GANPQSNPAPSQVIGAGSAGPSSQPPGTVIAAFIRTSSGT SVPVVKEGPLRSSSYVQGVVTGAPVEGLLV
 PEETLRELLRDQGHLPQVLSRGS HNL SLVGNQTLSPPSHPTVGLTPVAELES SSGSGLP FVTEPSV
 TRSPTQAPFSPFNPTSLIKMEPQDI

TRTRPLE - GFP Tag - V

Restriction Sites:

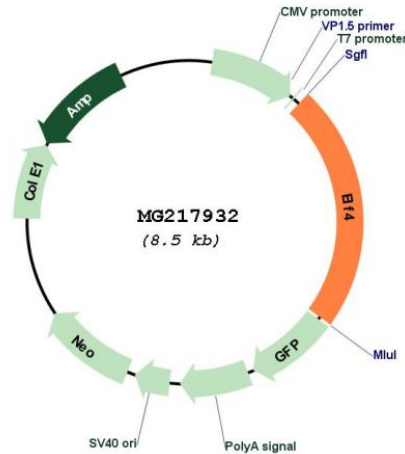
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_019680

ORF Size: 1965 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_019680.2](#), [NP_062654.2](#)

RefSeq Size: 5847 bp

RefSeq ORF: 1968 bp

Locus ID: 56501

UniProt ID: [Q9Z2U4](#)

Cytogenetics: X A5

Gene Summary: Transcriptional activator that binds to DNA sequences containing the consensus 5'-WGGA-3'. Transactivates promoters of the hematopoietic growth factor genes CSF2, IL3, IL8, and of LYZ. Acts synergistically with RUNX1 to transactivate the IL3 promoter (By similarity). Also transactivates the PRF1 promoter in natural killer (NK) cells. Plays a role in the development and function of NK and NK T-cells and in innate immunity. Controls the proliferation and homing of CD8+ T-cells via the Kruppel-like factors KLF4 and KLF2. Controls cell senescence in a p53-dependent manner. Can also promote cellular transformation through inhibition of the p16 pathway.[UniProtKB/Swiss-Prot Function]