

Product datasheet for **MG226741**

Nrf1 (NM_010938) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nrf1 (NM_010938) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nrf1
Synonyms:	C87038; D6Ertd415e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226741 representing NM_010938
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGAGCACGGAGTGACCCAACTGAACACATGGCTACCATAGAAGCCCATGCAGTGGCCAGCAAG
 TCCAGCAGGTCCATGTAGCCACGTACACTGAGCACAGTATGCTAAGTGCTGATGAAGACTCCCCTTCTC
 CCCCAGGACACTTCTTATGATGACTCGGACATCCTCAACTCCACGGCAGCTGATGAGGTAAGTCCCAT
 CTGGCTGCTGCAGGTCCTGTGGGAATGGCCGCTGCTGCTGCTGTGGCAACAGGGAAGAAACGGAAACGGC
 CTCATGTGTTGAGTCTAATCCATCTATCCGAAAGAGACAGCAGACACGTTTGCTTCGAAACTCAGAGC
 CACGTTGGATGAGTACACGACGCGAGTGGGACAGCAAGCGATTGTACTCTGCATCTACCCTCCAAACCC
 AACCTGTCTTCAAGGTGTTGGCGCAGCACCTTTGGAGAATGTGGTGCAGAAAGTACAAGAGCATGATCC
 TGAAGACCTCGAGTCTGCTCTGGCAGAACACGCCCTGCGCCACAGGAGTTAATTGAGAGCTGCCGCC
 TCTACCATCGATGGGATTCCAGTCTCTGTGGACAAAATGACCCAGGCTCAGCTTCGGGCATTTATCCCA
 GAGATGCTCAAGTATCCACAGGTGCGGGGAAACAGGCTGGGGGAAAGAAAGTCAAGCTATCTGGT
 GGCCAGAAGATATCCCATGGGCCAATGTCCGCAGTGATGTCCGCACAGAAGAGCAAAAAACAAGGTTTC
 ATGGACCCAGGCATTACGGACCATAGTTAAAAATTGCTATAAGCAACATGGGCGGGAGGATCTTTTATAT
 GCTTTTGAAGATCAGCAAAACAAAACACTCAGGCCACCACACACAGTATAGCTCATCTCGTACCATCAC
 AGACCGTAGTACAGACCTTCAGCAACCCGTATGGCACCCTGTCGCTCATCCAGGTTGGTACAGGGCAAC
 AGTAGCCACATTTGGCTGATGCTTCAAGACTGCCAACACAGTCACTGTTGCCAAGTGAATTACTCTGCT
 GTGGCTGATGGAGAGGTGAACAAAACACTGGGCCACGTTACAGGGCGGTGAAATGACCATCCAGAGACGC
 AAGCATCAGAGGCCACCCAGGCGGTAGCATCACTGGCAGAAAGCCGAGTGGCAGCTTCTCAGGAGATGC
 GCAGGGAGCCACTGTACCATGGCCCTCAACAGTGAAGCTGCCGCCATGCTGTCGCCACTCTGGCGGAA
 GCCACCTTACAAGGTGGGGGACAGATAGTCTGTCTGGGAAACCGCAGCAGCCGTCGGAGCACTTACTG
 GAGTCCAAGATGCTAATGGCCTGGTCCAGATCCCTGTGAGCATGTACCAGACTGTGGTAACCAGCCTCGC
 CCAGGGCAACGGGCCGCTGCAGGTGGCCATGGCCCCAGTGACCACCAGGATATCGGACAGCGCAGTACC
 ATGGATGGCCAGGCTGTGGAGGTGGTACCTTGGAAACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226741 representing NM_010938
 Red=Cloning site Green=Tags(s)

MEEHGVTQTEHMTIEAHAVAQQVQVHVATYTEHSMLSADESPSSPEDTSDYDSDILNSTAADEVTAH
 LAAAGPVGMAAAAVATGKKRKRPHVFESNPSIRKRQQRLLRKLRLATLDEYTTTRVGQQAIVLCISPSKP
 NPVVFVFGAAPLENVVRKYKSMILEDLESALAEHAPAPQEVNSELPLTIDGIPVSVDKMTQAQLRAFIP
 EMLKYSTGRGKPGWGKESCKPIWWPEDIPWANVRSVDRTEEKQQRVSWTQALRTIVKNCYKQHGREDLLY
 AFEDQQTQTQATTTTHSIAHLVPSQTVVQTFSNPDGTVSLIQVGTGATVATLADASELPPTVTVAQVNYSA
 VADGEVEQNWATLQGGEMTIQTTQASEATQAVASLAEAAVAASQEMQQGATVTMALNSEAAAHAVATLAE
 ATLQGGGQIVLSGETAAAVGALTGVQDANGLVQIPVSMYQTVVTSLAQNGPQVQVAMAPVTRISDSAVT
 MDGQAVEVVTLEQ

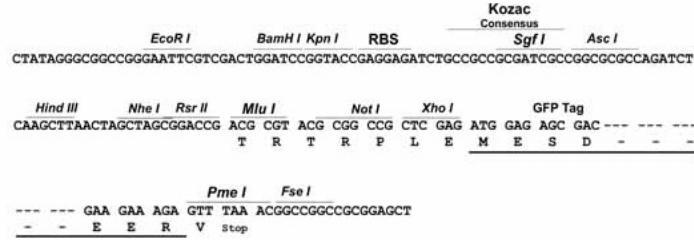
TRTRPLE - GFP Tag - V

Restriction Sites:

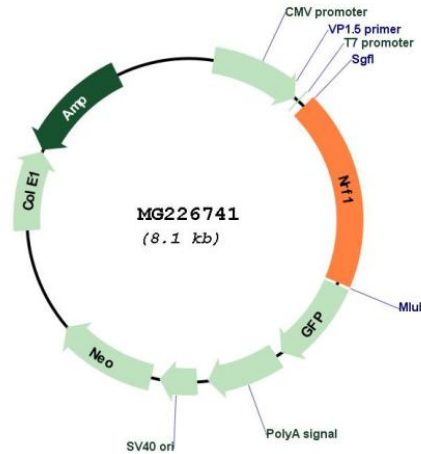
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_010938

ORF Size: 1509 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_010938.4](#), [NP_035068.3](#)

RefSeq Size: 3584 bp

RefSeq ORF: 1512 bp

Locus ID: 18181

UniProt ID: [Q9WU00](#)

Cytogenetics: 6 12.47 cM

Gene Summary: Transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. Links the transcriptional modulation of key metabolic genes to cellular growth and development. Implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication (By similarity).[UniProtKB/Swiss-Prot Function]