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Product datasheet for RC217852

NRF1 (NM_001040110) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NRF1 (NM_001040110) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NRF1
Synonyms:	ALPHA-PAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC217852 representing NM_001040110
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGAACACGGAGTGACCCAAACCGAACATATGGCTACCATAGAAGCACATGCAGTGGCCCAGCAAG
TGCAGCAGGTCCATGTGGCTACTTACACCGAGCATAGTATGCTGAGTGCTGATGAAGACTCGCCTTCTTC
TCCCGAGGACACCTCTTACGATGACTCAGATATACTCAACTCCACAGCAGCTGATGAGGTGACAGCTCAT
CTGGCAGCTGCAGGTCCTGTGGGAATGGCCGCTGCTGCTGCTGTGGCAACAGGAAAGAAACGGAAACGGC
CTCATGTATTTGAGTCTAATCCATCTATCCGGAAGAGGCAACAAACACGTTTGCTTCGGAAACTTCGAGC
CACGTTAGATGAATATACTACTCGTGTGGGACAGCAAGCTATTGTCCTCTGTATCTCACCCTCCAAACCT
AACCCTGTCTTTAAAGTGTTTGGTGCAGCACCTTTGGAGAATGTGGTGCGTAAGTACAAGAGCATGATCC
TGGAAGACCTGGAGTCTGCTCTGGCAGAACACGCCCCTGCGCCACAGGAGGTTAACTCAGAACTGCCGCC
TCTCACCATCGACGGAATTCCAGTCTCTGTGGACAAAATGACCCAGGCCCAGCTTCGGGCATTTATCCCA
GAGATGCTCAAGTACTCTACAGGTCGGGGAAAACCAGGCTGGGGGAAAGAAAGCTGCAAGCCCATCTGGT
GGCCTGAAGATATCCCCTGGGCAAATGTCCGGAGTGATGTCCGCACAGAAGAGCAAAAGCAGAGGGTTTC
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GCCTTTGAAGATCAGCAAACGCAAACACAGGCCACAGCCACACATAGTATAGCTCATCTTGTACCATCAC
AGACTGTAGTCCAGACTTTTAGTAACCCTGATGGCACTGTCTCACTTATCCAGGTTGGTACGGGGGCAAC
AGTAGCCACATTGGCTGATGCTTCAGAATTGCCAACCACGGTCACCGTTGCCCAAGTGAATTATTCTGCC
GTGGCTGATGGAGAGGTGGAACAAAATTGGGCCACGTTACAGGGAGGTGAGATGACCATCCAGACGACGC
AAGCATCAGAGGCCACCCAGGCGGTGGCATCGTTGGCAGAGGCCGCAGTGGCAGCTTCTCAGGAGATGCA
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GCCACCTTACAAGGTGGGGGACAGATCGTCTTGTCTGGGGAAACCGCAGCAGCCGTCGGAGCACTTACTG
GAGTCCAAGATGCTAATGGCCTGGTCCAGATCCCTGTGAGCATGTACCAGACTGTGGTGACCAGCCTCGC
CCAGGGCAACGGACCAGTGCAGGTGGCCATGGCCCCTGTGACCACCAGGATATCAGACAGCGCAGTCACC
ATGGACGGCCAAGCTGTGGAGGTGGTGACATTGGAACAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217852 representing NM_001040110
Red=Cloning site Green=Tags(s)

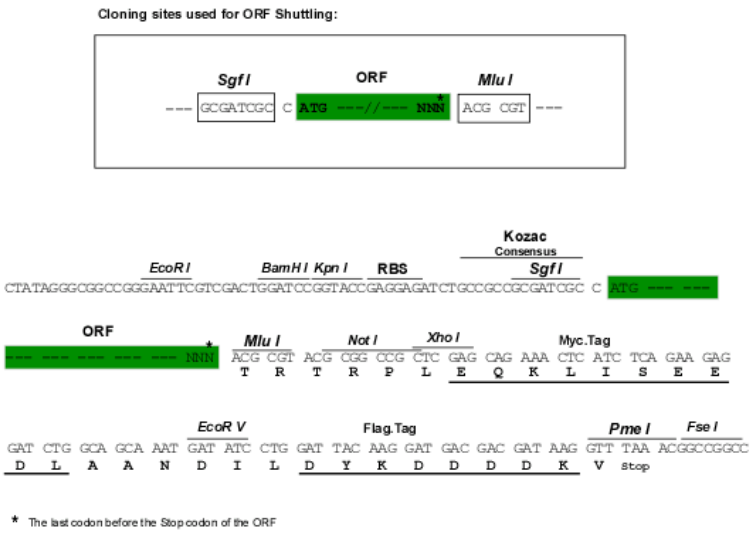
MEEHGVTQTEHMATIEAHAVAQQVQQVHVATYTEHSMLSADEDSPSSPEDTSYDDSDILNSTAADEVTAH
LAAAGPVGMAAAAAVATGKKRKRPHVFESNPSIRKRQQTRLLRKLRATLDEYTTRVGQQAIVLCISPSKP
NPVFKVFGAAPLENVVRKYKSMILEDLESALAEHAPAPQEVNSELPPLTIDGIPVSVDKMTQAQLRAFIP
EMLKYSTGRGKPGWGKESCKPIWWPEDIPWANVRSDVRTEEQKQRVSWTQALRTIVKNCYKQHGREDLLY
AFEDQQTQTQATATHSIAHLVPSQTVVQTFSNPDGTVSLIQVGTGATVATLADASELPTTVTVAQVNYSA
VADGEVEQNWATLQGGEMTIQTTQASEATQAVASLAEAAVAASQEMQQGATVTMALNSEAAAHAVATLAE
ATLQGGGQIVLSGETAAAVGALTGVQDANGLVQIPVSMYQTVVTSLAQGNGPVQVAMAPVTTRISDSAVT
MDGQAVEVVTLEQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2704_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001040110

ORF Size: 1509 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.

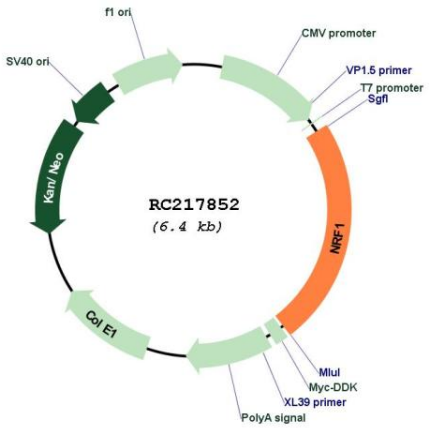
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

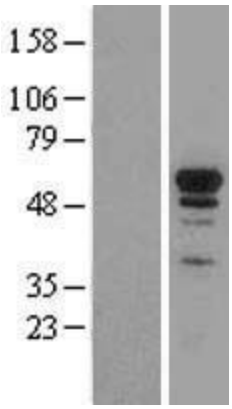
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_001040110.2
RefSeq Size:	3523 bp
RefSeq ORF:	1512 bp
Locus ID:	4899
UniProt ID:	Q16656
Cytogenetics:	7q32.2
Protein Families:	Transcription Factors
Protein Pathways:	Huntington's disease
MW:	53.4 kDa
Gene Summary:	This gene encodes a protein that homodimerizes and functions as a transcription factor which activates the expression of some key metabolic genes regulating cellular growth and nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication. The protein has also been associated with the regulation of neurite outgrowth. Alternative splicing results in multiple transcript variants. Confusion has occurred in bibliographic databases due to the shared symbol of NRF1 for this gene and for "nuclear factor (erythroid-derived 2)-like 1" which has an official symbol of NFE2L1. [provided by RefSeq, May 2014]

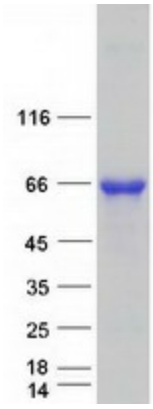
Product images:



Circular map for RC217852



Western blot validation of overexpression lysate (Cat# [LY421681]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217852 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NRF1 protein (Cat# [TP317852]). The protein was produced from HEK293T cells transfected with NRF1 cDNA clone (Cat# RC217852) using MegaTran 2.0 (Cat# [TT210002]).