

Product datasheet for **RG204140**

Nrf2 (NFE2L2) (NM_006164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nrf2 (NFE2L2) (NM_006164) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nrf2
Synonyms:	HEBP1; IMDDHH; Nrf-2; NRF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204140 representing NM_006164
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGGACTTGGAGCTGCCGCCCGGGACTCCCGTCCCAGCAGGACATGGATTTGATTGACATACTTT
 GGAGGCAAGATATAGATCTTGGAGTAAGTCGAGAAGTATTTGACTTCAGTCAGCGACGAAAAGAGTATGA
 GCTGGA AAAACAGAAAAACTTGA AAAGAAAGACAAGAACAACCTCCAAAAGGAGCAAGAGAAAAGCCTTT
 TTCGCTCAGTTACAAC TAGATGAAGAGACAGGTGAATTTCTCCAATTCAGCCAGCCAGCACATCCAGT
 CAGAAACCAGTGGATCTGCCAACTACTCCAGGTTGCCACATTCCAAATCAGATGCTTTGACTTTGA
 TGACTGCATGCAGCTTTGGCGCAGACATTCGCTTTGTAGATGACAATGAGGTTTCTTCGGCTACGTTT
 CAGTCACTTGTCTGATATTCGCGTCACATCGAGAGCCAGTCTTCATTGCTACTAATCAGGCTCAGT
 CACCTGAAACTTCTGTTGCTCAGGTAGCCCTGTTGATTTAGACGGTATGCAACAGGACATTGAGCAAGT
 TTGGGAGGAGCTATTATCCATTCCTGAGTTACAGTGTCTTAATATTGAAAATGACAAGCTGGTTGAGACT
 ACCATGGTTCCAAGTCCAGAAGCCAAACTGACAGAAGTTGACAATTATCATTTTTACTCATCTATACCCT
 CAATGGA AAAAGAAGTAGGTAACGTAGTCCACATTTTCTTAATGCTTTTGAGGATTCCTTCAGCAGCAT
 CCTCTCCACAGAAGACCCCAACCAAGTTGACAGTGAACCTATAAATTCAGATGCCACAGTCAACACAGAT
 TTTGGTGAATTTTATTCTGCTTTCATAGCTGAGCCAGTATCAGCAACAGCATGCCCTCACCTGCTA
 CTTTAAGCCATTCACTCTCTGAACCTCTAAATGGGCCATTGATGTTTCTGATCTATCACTTTGCAAAGC
 TTTCAACCAAAACCACCTGAAAGCACAGCAGAATTCATGATTTCTGACTCCGGCATTCTACTAACACA
 AGTCCCAGTGTGGCATCACCAGAACACTCAGTGGAACTTCCAGCTATGGAGACACACTACTTGGCCTCA
 GTGATTTGAAGTGGAAGAGCTAGATAGTGCCTGGAAGTGTCAAACAGAATGGTCTCTAAAACCCAGT
 ACATTTCTGCGGATATGGTACAACCCTGTCAACCTCTCAGGGCGAGAGCACTCACGTGCATGATGCC
 CAATGTGAGAACACACCAGAGAAAAGAAATTCCTGTAAAGTCTGGTTCATCGAAAACCCATTACAAAAG
 ACAAACATTCAAGCCGCTTGGAGGCTCATCTACAAGAGATGAACCTAGGGCAAAAGCTCTCCATATCCC
 ATTCCTGTAGAAAAATCATTAACTCCCTGTTGTTGACTTCAACGAAATGATGTCCAAAGAGCAGTTC
 AATGAAGCTCACTTGCATTAATTCGGGATACGTAGGAGGGTAAGAATAAAGTGGCTGCTCAGAATT
 GCAGAAAAAGAAAAGTGGAAAATATAGTAGAAGTACAGCAAGATTTAGATCATTTGAAAGATGAAAAAG
 AAAATTGCTCAAAGAAAAGGAGAAAATGACAAAAGCCTTCACTACTGAAAAACAACCTCAGCACCTTA
 TATCTCGAAGTTTTCAGCATGCTACGTGATGAAGATGGAAAACCTTATTCTCCTAGTGAATACTCCCTGC
 AGCAAACAAGAGATGGCAATGTTTTCTTGTTCCTCAAAAAGTAAGAAGCCAGATGTTAAGAAAAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG204140 representing NM_006164
 Red=Cloning site Green=Tags(s)

MMDLELPPPGLPSQQDMDLIDILWRQDIDLGVSRVDFDQSRRKEYELEKQKLEKERQEQLQKEQEKAF
 FAQLQLDEETGEFLPIQPAQHIQSETSGSANYSQVAHIPKSDALYFDDCMQLLAQTFFVDDNEVSSATF
 QSLVPDIPGHIESPVFIATNQAQSPETSVAQVAPVDLDGMQQDIEQVWEELL SIPELQCLNIENDKLVET
 TMVPSPEAKL TEVDNYHFYSSIPSMEKEVGNCSPHFLNAFEDSFSSILSTEDPNQLTVNSLNSDATVNTD
 FGDEFYSAFIAEPSISNSMPSATLSHLSSELLNGPIDVSDL SLCKAFNQNHPESTAEFNDSGSI SLNT
 SPSVASPEHSVSSSYGDTLLGLSDSEVEELDSAPGSVKQNGPKTPVHSSGDMVQPLSPSQGQSTHVHDA
 QCENTPEKELPVSPGHRKTPFTKDKHSSRLEAHLTRDELRAKALHIPFPVEKIINLPVVDNFEMMSKEQF
 NEAQLALIRDIRRRGKNKVAQAQCRKRKLENIVELEQDLHLKDEKEKLLKEKGENDKSLHLLKQQLSTL
 YLEVFVSMRLRDEDGKPYSPSEYSLQQTRDGNVFLVPKSKKPDVKKK

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_006164

ORF Size: 1815 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_006164.5](#)

RefSeq Size: 2439 bp

RefSeq ORF: 1818 bp

Locus ID: 4780

UniProt ID: [Q16236](#)

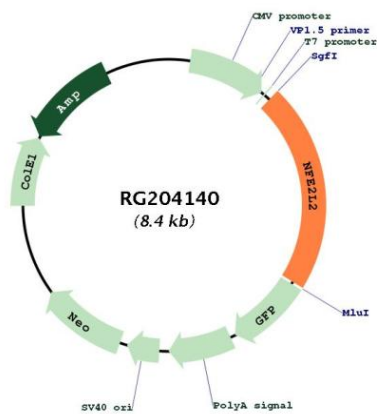
Cytogenetics: 2q31.2

Domains: BRLZ

Protein Families: Transcription Factors

Gene Summary: This gene encodes a transcription factor which is a member of a small family of basic leucine zipper (bZIP) proteins. The encoded transcription factor regulates genes which contain antioxidant response elements (ARE) in their promoters; many of these genes encode proteins involved in response to injury and inflammation which includes the production of free radicals. Multiple transcript variants encoding different isoforms have been characterized for this gene. [provided by RefSeq, Sep 2015]

Product images:



Circular map for RG204140