

## Product datasheet for MR229551

### Nfe2 (NM\_001302338) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nfe2 (NM\_001302338) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nfe2  
**Synonyms:** NF-E2; NF-E2/P45; p45; p45nf-e2; p45NFE2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR229551 representing NM\_001302338  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCCCGTGTCTCTCAGCAGAACAGGAACAGGTTATCACAGCTGCCTGTTGGGGAGCTTGGAGAGA  
 TGGAACTGACTTGGCAAGAGATCATGTCCACTGAGCTGCAGGGTCTAAATGTTCCAAGTGAGACATC  
 TTTTGAGCCTCAAGCACCCACCCATACCTGGGCCACTGCCACCTCCAACATATTGCCCTGTTCATT  
 CATCCAGATGCAGGCTTCTCCCTCCCCACCATCTTATGAGCTCCAGCATCTACTCCCATGTCCAG  
 AACTACCATACTCTATGGTAATGTAGCCATACCAGTGTCAAAGCCACTTACCCTTTCAGGCCTGCTCAA  
 TGAGCCCCCTCCAGACCACTTAGCTCTCCTGGACATTGGGCTGCCAGTGGGGCAACCAAGCCCCAAGAA  
 GACCCAGAATCTGACTCAGGATTATCCCTCAACTACAGTGATGCAGAATCTCTTGAGCTAGAGGGTATGG  
 AGGCTGGCAGGGGAGGAGCGAGTACGCGGACATGTACCCAGTGGAGTATCCTTACTCACTTATGCCCAA  
 TTCTTTGGCCCATCCCAACTATACTCTTCCACCCACTGAGACACCTTGGCCTTAGAGTCATCTCCGGT  
 CCAGTTCGGGCTAAGCCTGTGTCCGTGGGGAGGCAGGGAGTCCGGACGAGCGCGGAGCCCTGGCCATGA  
 AGATTCCTTCCCTACGGACAAGATAGTTAACTTGCCGGTAGATGACTTTAATGATTTGTTGGCACAGTA  
 TCCGCTAACGGAGAGCCAGCTGGCTCTAGTTCGGGACATCCGTCGACGGGCAAGAACAAGTGGCAGCC  
 CAAAAGTGTGCAAGAGAAAACCTGAAAACATTGTGCAGCTGGAGCGAGAGCTGGAGCGGCTGAGCAGTG  
 AAAGGGAGCGGCTTCTCAGAGCCCGAGGGGAGGCTGACCCCACTCTGGAGGTCATGCGCCAACAGCTGGC  
 AGAGCTGTACCATGATATTTTCCAGCATCTTCGGGATGAATCTGGCAACAGTTACTACCCAGAGGAATAT  
 GTACTGCAACAGGCTGCTGATGGTGCCATCTTCTGGTACCCCGTGAACCAAAATGGAGGCTACAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR229551 representing NM\_001302338  
 Red=Cloning site Green=Tags(s)

MPPCPPQQRNRLSQLPVGELGEMELTWQEIMISITELQGLNVPSETSFEPQAPTYPGGLPPPTYCPCSI  
 HPDAGFSLPPPSYELPASTPHVPELPYSYGNVAIPVSKPLTSLGLLNEPLPDHLALLDIGLPVGQPKPQE  
 DPESDSGLSLNYSDAESLELEGEAGRRESEYADMYPEYYPYSLMPNSLAHPNYLTPPETPLALESSSG  
 PVRAKPAVRGEAGSRDERRALAMKIPFPDKIVNLPVDDFNELLAQYPLTESQLALVRDIRRRGKNKVAA  
 QNCRKRKLETIVQLERELERLSSERERLLRARGEADRTLEVMRQQLAELYHDFQHLRDESGNSYSPEEY  
 VLQQAADGAIFLVPRGTMKMEATD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001302338

**ORF Size:** 1119 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001302338.1](#), [NP\\_001289267.1](#)

**RefSeq Size:** 1896 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 18022

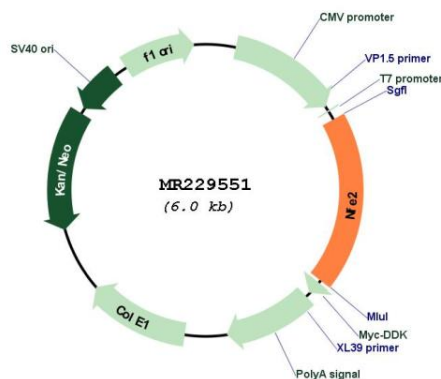
**UniProt ID:** [Q07279](#)

**Cytogenetics:** 15 58.62 cM

**MW:** 41.5 kDa

**Gene Summary:** Component of the NF-E2 complex essential for regulating erythroid and megakaryocytic maturation and differentiation. Binds to the hypersensitive site 2 (HS2) of the beta-globin control region (LCR). This subunit (NFE2) recognizes the TCAT/C sequence of the AP-1-like core palindrome present in a number of erythroid and megakaryocytic gene promoters. Requires MAFK or other small MAF proteins for binding to the NF-E2 motif. May play a role in all aspects of hemoglobin production from globin and heme synthesis to procurement of iron. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR229551