

## Product datasheet for MR229553

### Nfe2 (NM\_001302340) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nfe2 (NM_001302340) 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:	>MR229553 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCCGTGTCTCTCAGCAGAACAGGAACAGGTTATCACAGCTGCCTGTTGGGGAGCTTGGAGAGA  
TGGAACTGACTTGGCAAGAGATCATGTCCACTGAGCTGCAGGGTCTAAATGTTCCAAGTGAGACATC  
TTTTGAGCCTCAAGCACCCACCCATACCTGGGCCACTGCCACCTCCAACATATTGCCCTGTTCATT  
CATCCAGATGCAGGCTTCTCCCTCCCCACCATCTTATGAGCTCCAGCATCTACTCCCATGTCCAG  
AACTACCATACTCTATGGTAATGTAGCCATACCAGTGTCAAAGCCACTTACCCTTTCAGGCCTGTCAA  
TGAGCCCCCTCCAGACCACTTAGCTCTCCTGGACATTGGGCTGCCAGTGGGGCAACCAAGCCCCAAGAA  
GACCCAGAATCTGACTCAGGATTATCCCTCAACTACAGTGATGCAGAATCTCTTGAGCTAGAGGGTATGG  
AGGCTGGCAGGCGGAGGAGCGAGTACGCGGACATGTACCCAGTGGAGTATCCTTACTCACTTATGCCAA  
TTCTTTGGCCATCCCAACTATACTCTTCCACCCACTGAGACACCTTGGCCTTAGAGTCATCTCCGGT  
CCAGTTCGGGCTAAGCCTGTGTCCGTGGGAGGCAGGGAGTCCGGACGAGCGCGGAGCCCTGGCCATGA  
AGATTCCCTTCCCTACGGACAAGATAGTTAACTTGCCGGTAGATGACTTTAATGAGTTGTTGGCACAGTA  
TCCGCTAACGGAGAGCCAGCTGGCTCTAGTTCGGGACATCCGTCGACGGGCAAGAACAAGTGGCAGCC  
CAAACTGTCGCAAGAGAAAACCTGAAAACATTGTGCAGCTGGAGCGAGAGCTGGAGCGGCTGAGCAGTG  
AAAGGGAGCGGCTTCTCAGAGCCCGAGGGGAGGCTGACCCCACTCTGGAGGTCATGCGCCAACAGCTGGC  
AGAGCTGTACCATGATATTTTCCAGCATCTTCGGGATGAATCTGGCAACAGTTACTACCCAGGGAATAT  
GTACTGCAACAGGCTGTGATGGTGCCATCTTTCTGGTACCCCGTGAACCAAAATGGAGGCTACAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229553 protein sequence  
 Red=Cloning site Green=Tags(s)

MPPCPPQQRNRLSQLPVGELGEMELTWQEIMISITELQGLNVPSETSFEPQAPTPYGPLPPPTYCPCSI  
 HPDAGFSLPPPSYELPASTPHVPELPYSYGNVAIPVSKPLTSLGLLNEPLPDHLALLDIGLPVGQPKPQE  
 DPESDSGLSLNYSDAESLELEGMAGRRRSEYADMYPEYYPYSLMPNSLAHPNYLTPPETPLALESSSG  
 PVRAKPAVRGEAGSRDERRALAMKIPFPTDKIVNLPVDDFNELLAQYPLTESQLALVRDIRRRGKNKVAA  
 QNCRKRKLETIVQLERELERLSSERERLLRARGEADRTLEVMRQQLAELYHDIFQHLRDESGNSYSPEEY  
 VLQQAADGAIFLVPRGTMKMEATD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001302340

**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.

**RefSeq:** [NM\\_001302340.1](#), [NP\\_001289269.1](#)

**RefSeq Size:** 1474 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 18022

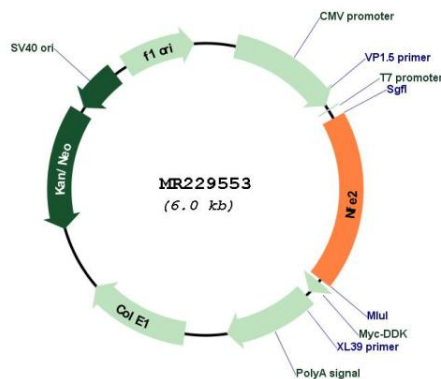
**UniProt ID:** [Q07279](#)

**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 MR229553