

## Product datasheet for **RC205883**

### **NF2 (NM\_000268) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NF2 (NM_000268) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NF2
Synonyms:	ACN; BANF; merlin-1; SCH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC205883 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCCGGGGCCATCGTTCCCGCATGAGCTTCAGCTCTCTCAAGAGGAAGCAACCCAAGACGTTACCCG  
 TGAGGATCGTCACCATGGACGCCGAGATGGAGTTCAATTGCGAGATGAAGTGAAAGGGAAGGACCTCTT  
 TGATTTGGTGTGCCGACTCTGGGGCTCCGAGAAACCTGGTTCTTTGGACTGCAGTACACAATCAAGGAC  
 ACAGTGGCTGGCTCAAATAGACAAGAAGGACTGGATCATGATGTTTCAAAGGAAGAACAGTACACCT  
 TTCACTTCTGGCCAAATTTTATCCTGAGAATGCTGAAGAGGAGCTGGTTCAGGAGATCACACAACATTT  
 ATTCTTCTACAGGTAAGAAGCAGATTTTAGATGAAAAGATCTACTGCCCTCCTGAGGCTTCTGTGCTC  
 CTGGCTTCTACGCCGTCAGGCCAAGTATGGTGACTACGACCCAGTGTTCACAAGCGGGGATTTTTGG  
 CCCAAGAGGAATTGCTTCAAAAAGGGTAATAAATCTGTATCAGATGACTCCGGAATGTGGGAGGAGAG  
 AATTACTGCTTGGTACGCAGAGCACCGAGGCCGAGCCAGGGATGAAGCTGAAATGGAATATCTGAAGATA  
 GCTCAGGACCTGGAGATGTACGGTGTGAACTACTTTGCAATCCGGAATAAAAAGGCCACAGAGCTGCTGC  
 TTGGAGTGGATGCCCTGGGGCTTACATTTATGACCTGAGAACAGACTGACCCCAAGATCTCCTTCCC  
 GTGGAATGAAATCCGAAACATCTCGTACAGTGACAAGGAGTTTACTATTAACCCTGGATAAGAAAATT  
 GATGTCTTCAAGTTTAACTCCTCAAAGCTTCGTGTTAATAAGCTGATTCTCCAGCTATGTATCGGGAACC  
 ATGATCTATTTATGAGGAGAAGGAAAGCCGATTCTTTGGAAGTTCAGCAGATGAAAGCCCAGGCCAGGGA  
 GGAGAAGGCTAGAAAGCAGATGGAGCGGCAGCCCTCGCTCGAGAGAAGCAGATGAGGGAGGAGGCTGAA  
 CGCAGCAGGGATGAGTTGGAGAGGAGGCTGCTGCAGATGAAAGAAGAAGCAACAATGGCCAACGAAGCAC  
 TGATCGGGTCTGAGGAGACAGCTGACCTGTTGGCTGAAAAGGCCAGATCACCGAGGAGGAGGCAAAAAT  
 TCTGGCCCAAGGCCCGCAGAGGCTGAGCAGGAAATGCAGCGCATCAAGGCCACAGCGATTTCGCACGGAG  
 GAGGAGAAGCGCCTGATGGAGCAGAAGGTGCTGGAAGCCGAGGTGCTGGCACTGAAGATGGCTGAGGAGT  
 CAGAGAGGAGGGCCAAAGAGGCAGATCAGCTGAAGCAGGACCTGCAGGAAGCACGCGAGGCGAGCGAAG  
 AGCCAAGCAGAAGCTCCTGGAGATTGCCACCAAGCCACGTACCCGCCATGAACCAATTCAGCACCG  
 TTGCCTCCTGACATACCAAGCTTCAACCTCATTGGTGACAGCCTGTCTTTCGACTTCAAAGATACTGACA  
 TGAAGCGGCTTTCATGGAGATAGAGAAAGAAAAGTGAATACATGGAAAAGAGCAAGCATCTGCAGGA  
 GCAGCTCAATGAACTCAAGACAGAAATCGAGGCCCTTAAAAGTAAAAGAGAGGGAGACAGCTCTGGATATT  
 CTGCACAATGAGAACTCCGACAGGGGTGGCAGCAGCAAGCACAATACCATTAAAAGCTCACCTTGACAG  
 GCGCCAAGTCCCAGTGGCCTTCTTTGAAGAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC205883 protein sequence  
 Red=Cloning site Green=Tags(s)

MAGAIASRMSFSSLKRKQPKFTFVRIVTMDAEMEFNCEMKWKGDLDLVCRTLGLRETWFFGLQYTIKD  
 TVAWLKIDKKVLDHVSKEEPVTFHFLAKFYPENAEELVQEITQHLFFLQVKKQILDEKIYCPPEASVL  
 LASYAVQAKYGDYDPSVHKRGFLAQEELLPKRVINLYQMTPEMWEERITAWYAEHRGRARDEAEMEYLKI  
 AQDLEMYGVNYFAIRNKKGTELLLVDLGLHIYDPENRLTPKISFPWNEIRNISYSDKEFTIKPLDKKI  
 DVFKFNSSKLRVNKLIQLCIGNHDLFMRRRKADSLVQQMKAQAREEKARKQMERQRLAREKQMRREEAE  
 RTRDELERRLLQMKEEATMANEALMRSEETADLLAEKAQITEEEAKLLAQKAAEAQEMQRIKATAIRTE  
 EEKRLMEQKVLAEVLALKMAEESERRAKEADQLKQDLQEAREARRAKQLLEIATKPTYPPMNP  
 LPPDIPSFNLIIGDSL SFDKDTDMKRLSMEIEKEKVEYMEKSKHLQEQNLKTEIEALKLKERETALDI  
 LHNENSDRGSSKHNTIKKLTLSAKSRVAFEEEL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6066\\_e03.zip](https://cdn.origene.com/chromatograms/mk6066_e03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000268

**ORF Size:** 1785 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](mailto: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.

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

**RefSeq:** [NM\\_000268.4](#)

**RefSeq Size:** 6046 bp

**RefSeq ORF:** 1788 bp

**Locus ID:** 4771

**UniProt ID:** [P35240](#)

**Cytogenetics:** 22q12.2

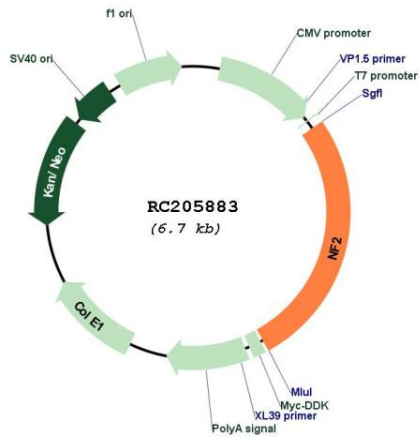
**Domains:** B41, ERM

**Protein Families:** Druggable Genome

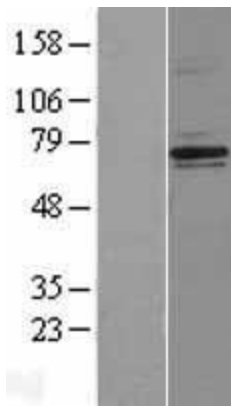
**MW:** 69.7 kDa

**Gene Summary:** This gene encodes a protein that is similar to some members of the ERM (ezrin, radixin, moesin) family of proteins that are thought to link cytoskeletal components with proteins in the cell membrane. This gene product has been shown to interact with cell-surface proteins, proteins involved in cytoskeletal dynamics and proteins involved in regulating ion transport. This gene is expressed at high levels during embryonic development; in adults, significant expression is found in Schwann cells, meningeal cells, lens and nerve. Mutations in this gene are associated with neurofibromatosis type II which is characterized by nervous system and skin tumors and ocular abnormalities. Two predominant isoforms and a number of minor isoforms are produced by alternatively spliced transcripts. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC205883



Western blot validation of overexpression lysate (Cat# [LY400101]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205883 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).