

Product datasheet for RC231213

NFS1 (NM_001198989) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | NFS1 (NM_001198989) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | NFS1 |
| Synonyms: | COXPD52; HUSSY-08; IscS; NIFS |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC231213 representing NM_001198989 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCTCCGAGCCGCTTGAGAGCGGGCGGCAGTGGCGGTGACAGCGGCTCCAGGGCCGAAGCCCGCGG
CGCCCACTCGGGGCTGCGCCTGCGCGTTGGAGACCGTGTCTCCTCAGTCTGCGGTTCCCGCAGATACAGC
CGCTGCCCGGAGGTGGGGCCAGTGTGCGACCTCTCTATATGGATGTGCAAGCTACAACCTCTGGAC
CCCCGGTGCTTGATGCCATGCTCCCTACCTAATCAACTACTATGGGAACCCACACTCCCGGACACATG
CTTATGGCTGGGAGAGTGAGGCAGCCATGGAACGTGCTCGTCAGCAAGTAGCATCTCTGATTGGAGCTGA
TCCTCGTGAGATCAATTTACTAGTGGTCTACTGAATCCAACAACATAGCAATTAAGGAACTAGAGGCT
GCTATCCAGCCAGATACTAGCCTGGTGTGATGACTGTGAACAATGAGATTGGAGTGAAGCAGCCCTA
TTGCAGAAATAGGGCGGATTTGCAGTCCAGAAAGGTATATTTCCATACTGATGCAGCCAGGCTGTTGG
AAAAATCCCACTTGATGTCAATGACATGAAAATTGATCTCATGAGCATTAGTGGTCACAAAATCTACGGT
CCCAAAGGGTGGTGCCATCTACATCCGTCGCCGGCCCGTGTGCGTGTGGAGGCCCTGCAGAGTGGAG
GGGGCAGGAGCGGGTATGCGGTCTGGGACAGTGCCACACCCTTAGTGGTGGGGCTGGGGCTGCGTG
TGAGGTGGCACAGCAAGAGATGGAGTATGACCACAAGCGAATCTCAAAGTTGTGAGAGCGGCTGATACAG
AATATAATGAAGAGCCTCCAGATGTGGTGAATGGGACCCTAAGCACCATTATCCCGCTGTATCA
ACCTCTCCTTTGCATATGTGGAAGGGAAAGTCTGCTGATGGCACTGAAGGACGTTGCCTTATCCTCAGG
GAGTGCCTGCACCTCTGCATCCCTGGAGCCCTCTATGTGCTTAGAGCAATTGGCACTGATGAGGATTTA
GCGCACTTTCTATCAGGTTTGAATTGGCCGCTTCACTACAGAGGAGGAAGTGGACTACACAGTGGAGA
AATGCATTGAGCATGTGAAGCGTCTTCGAGAAATGAGCCCTCTCTGGGAGATGGTTCAGGATGGCATTGA
CCTCAAGAGCATCAAGTGGACCCAACAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC231213 representing NM_001198989
Red=Cloning site Green=Tags(s)

MLLRAAWRRAAVAVTAAPGPKPAAPTRGLRLRVGDRAPQSAVPADTAAPEVGPVLRPLYMDVQATTPLD
 PRVLDAMLPYLINYYGNPHSRTHAYGWESEAAMERARQQVASLIGADPREIIFTSGATESNNIAIKELEA
 AIQPDTSLSVMTVNNEIGVKQPIAEIGRICSSRKVYFHTDAAQAVGKIPLDVNDMKIDLMSISGHKIYG
 PKGVGAIYIRRRPRVRVEALQSGGGQERGMRSQVPTPLVVVGLGAACEVAQQEMEYDHKRISKLSERLIQ
 NIMKSLPDVVMNGDPKHHYPGCINLSFAYVEGESLLMALKDVALSSGSACTSASLEPSYVLAIGTDEDL
 AHSSIRFGIGRFTTEEEVDYTVKEKCIQHVKRLREMSPLWEMVQDGDIDKSIKWTQH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8057_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001198989

ORF Size: 1218 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_001198989.2](#)

RefSeq ORF: 1221 bp

Locus ID: 9054

UniProt ID: [Q9Y697](#)

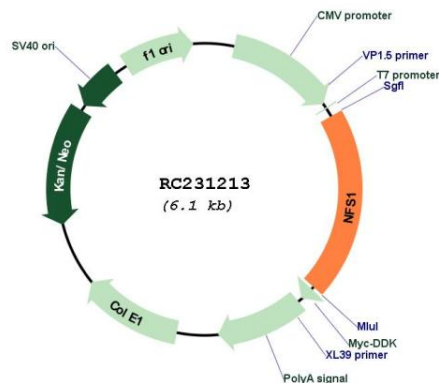
Cytogenetics: 20q11.22

Protein Pathways: Thiamine metabolism

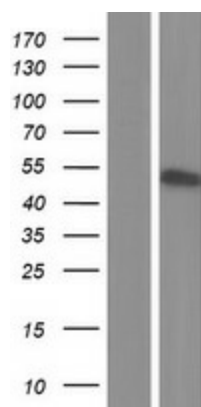
MW: 44.8 kDa

Gene Summary: Iron-sulfur clusters are required for the function of many cellular enzymes. The proteins encoded by this gene supply inorganic sulfur to these clusters by removing the sulfur from cysteine, creating alanine in the process. This gene uses alternate in-frame translation initiation sites to generate mitochondrial forms and cytoplasmic/nuclear forms. Selection of the alternative initiation sites is determined by the cytosolic pH. The encoded proteins belong to the class-V family of pyridoxal phosphate-dependent aminotransferases. Alternatively spliced transcript variants have been described. [provided by RefSeq, Nov 2010]

Product images:



Circular map for RC231213



Western blot validation of overexpression lysate (Cat# [LY434212]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231213 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).