

## Product datasheet for RC201408

### SFXN2 (NM\_178858) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SFXN2 (NM_178858) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SFXN2
Synonyms:	SLC56A2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201408 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGCTGACCTGTCTGGCTTAAACATCGATGCCCCCGTTGGGACCAGCGCACCTTCTGGGGAGAG  
TGAAGCACTTCTAAACATCACGGACCCCCGCACTGTCTTTGTATCTGAGCGGGAGCTGGACTGGGCCAA  
GGTGATGGTGGAGAAGAGCAGGATGGGGTTGTGCCCCAGGCACCAAGTGGAGCAGCTGCTGTATGCC  
AAGAAGCTGTATGACTCGGCCTCCACCCGACACTGGGAGAAGATGAATGTCATCGGGCGCATGTCTT  
TCCAGTCTCTGGCGCATGATCATCACGGCTTCATGCTCCAGTCTACAGGACGATGCCGGCGGTGAT  
CTTCTGGCAGTGGGTGAACCAAGTCTTCAATGCCTTAGTCAACTACACCAACAGGAATGCCGCTTCCCC  
ACATCAGTCAGGCAGATGGCCCTTCTACTTACAGCCACAACCACTGCTGTGGCCACGGCTGTGGGCA  
TGAACATGTTGACAAAGAAAGCGCCGCCCTTGGTGGGCGCTGGGTGCCCTTTGCCGCTGTGGTGGCGC  
TAACTGTGTCAATATCCCATGATGCGACAGCAGGAGCTCATAAAGGGAATCTGCGTGAAGGACAGGAAT  
GAAAATGAGATTGGTCATTCGGGAGAGCTGCGGCATAGGCATCACCAAGTAGTTATTTCTCGGATCA  
CCATGTCAGCTCCTGGGATGATCTTGCTGCCAGTCATCATGGAAGGCTTGAGAAATTGCACTTCATGCA  
GAAAGTCAAGTCTGACGCCCCATTGACAGTCATGCTGAGCGGGTCTTCTCATCTTCATGGTGCCA  
GTGGCGTGTGGCTTTTCCACAGAAATGTGAATTGCCAGTTTCTATCTGGAACCGAAGCTCCAAGACA  
CTATCAAGCCAAGTATGGAGAAGTGGCCTTATGTCTACTTCAATAAGGGTCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201408 protein sequence  
Red=Cloning site Green=Tags(s)

MEADLSGFNIDAPRWDQRTFLGRVKHFLNITDPRTVVFVSERELDWAKVMVEKSRMGVPPGTQVEQLLYA  
 KKL YDSAFHPDTGEKMNVIGRMSFQLPGGMIITGFMLQFYRTMPAVIFWQVWNQSFNALVNYTNRNAASP  
 TSVRQMALSYFTATTTAVATAVGMNMLTKKAPPLVGRWVFFAAVAANCNVIPMMRQQLIKGICVKDRN  
 ENEIGHSRRAAAIGITQVVISRITMSAPGMILLPVIMERLEKLFHFMQKVKVLHAPLQVMLSGCFLIFMVP  
 VACGLFPQKCELPVSYLEPKLQDTIKAKYGELEPYVYFNKGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6052\\_d05.zip](https://cdn.origene.com/chromatograms/mk6052_d05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_178858

**ORF Size:** 966 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\\_178858.6](#)

**RefSeq Size:** 2562 bp

**RefSeq ORF:** 969 bp

**Locus ID:** 118980

**UniProt ID:** [Q96NB2](#)

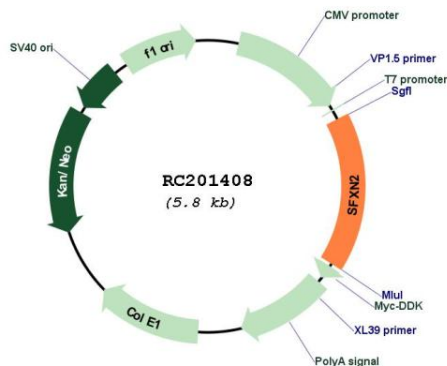
**Cytogenetics:** 10q24.32

**Protein Families:** Transmembrane

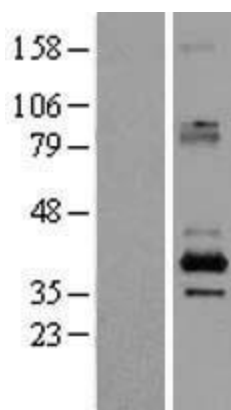
**MW:** 36.2 kDa

**Gene Summary:** Mitochondrial amino-acid transporter that mediates transport of serine into mitochondria. [UniProtKB/Swiss-Prot Function]

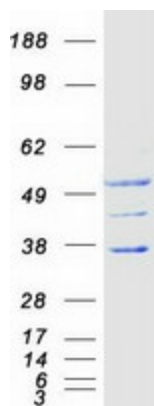
### Product images:



Circular map for RC201408



Western blot validation of overexpression lysate (Cat# [LY403612]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201408 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SFXN2 protein (Cat# [TP301408]). The protein was produced from HEK293T cells transfected with SFXN2 cDNA clone (Cat# RC201408) using MegaTran 2.0 (Cat# [TT210002]).