

## Product datasheet for SC108066

### SFXN1 (NM\_022754) Human Untagged Clone

#### Product data:

|                           |                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                                               |
| Product Name:             | SFXN1 (NM_022754) Human Untagged Clone                                                            |
| Tag:                      | Tag Free                                                                                          |
| Symbol:                   | SFXN1                                                                                             |
| Synonyms:                 | SLC56A1; TCC                                                                                      |
| Mammalian Cell Selection: | None                                                                                              |
| Vector:                   | <u>pCMV6-XL5</u>                                                                                  |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                                            |
| Fully Sequenced ORF:      | >OriGene ORF within SC108066 sequence for NM_022754 edited (data generated by NextGen Sequencing) |

```

ATGTCTGGAGAACTACCACCAACATTAACATCAAGGAACCTCGATGGGATCAAAGCACT
TTCATTGGACGAGCCAATCATTCTTCACTGTAACTGACCCAGGAACATTCTGTAAACC
AACGAACAACTCGAGAGTGCGAGAAAAATAGTACATGATTACAGGCAAGGAATTGTTCT
CCTGGTCTTACAGAAAATGAATTGTGGAGAGCAAAGTACATCTATGATTACGCTTTTCAT
CCTGACACTGGTGAGAAGATGATTTTGATAGGAAGAATGTCAGCCAGGTTCCCATGAAC
ATGACCATCACAGGTTGTATGATGACGTTTACAGGACTACGCCGGCTGTGCTGTTCTGG
CAGTGGATTAACCAAGTCCTTCAATGCCGTCGTCAATTACACCAACAGAAGTGGAGACGCA
CCCCTCACTGTCAATGAGTTGGGAACAGCTTACGTTTCTGCAACAACCTGGTGCCGTAGCA
ACAGCTCTAGGACTCAATGCATTGACCAAGCATGTCTCACCCTGATAGGACGTTTGTGTT
CCCTTTGCTGCCGTAGCTGCTGCTAATTGCATTAATATTCCATTAATGAGGCAAAAGGAA
CTCAAAGTTGGCATTCCCGTCACGGATGAGAATGGGAACCGCTTGGGGGAGTCGGCGAAC
GCTGCGAAACAAGCCATCACGCAAGTTGTGCTGTCCAGGATTCTCATGGCAGCCCTGGC
ATGGCCATCCCTCCATTCAATTATGAACACTTTGGAAAAGAAAGCCTTTTGAAGAGGTTT
CCATGGATGAGTGCACCCATTCAAGTTGGGTTAGTTGGCTTCTGTTTGGTGTGTTGCTACA
CCCCTGTGTTGTGCCCTGTTTCTCAGAAAAGTTCCATGTCTGTGACAAGCTTGGAGGCC
GAGTTGCAAGCTAAGATCCAAGAGAGCCATCCTGAATTGCGACGCGTGTACTTCAATAAG
GGATTGTAA
  
```

Clone variation with respect to NM\_022754.5



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_022754 unedited  
 GTTGGCAGATTTTGTAAACGACTCATATAGGCGGCCGCGAAATTCGCACGAGGCGGCAG  
 CCCGGGGGAAGCGTCCGGGACCTGTCTGGAGAACTACCACCAAACATTAACATCAAGGAA  
 CCTCGATGGGATCAAAGCACTTTTCATTGGACGAGCCAATCATTTCTTCACTGTAAGTAC  
 CCCAGGAACATTCTGTAAACCAACGAACAACTCGAGAGTGCAGAGAAAAATAGTACATGAT  
 TACAGGCAAGGAATTGTTCTCTGGTCTTACAGAAAAATGAATTGTGGAGAGCAAAGTAC  
 ATCTATGATTGAGCTTTTCATCTGACACTGGTGAGAAGATGATTTTGATAGGAAGAATG  
 TCAGCCCAGGTTCCCATGAACATGACCATCACAGGTTGTATGATGACGTTTTACAGGACT  
 ACGCCGGCTGTGCTGTTCTGGCAGTGGATTAACCAAGTCCTTCAATGCCGTCGTCAATTAC  
 ACCAACAGAAGTGGAGAGCGACCCCTCACTGTCAATGAGTTGGGAACAGCTTACGTTTCT  
 GCAACAACTGGTGCCGTAGCAACAGCTCTAGGACTCAATGCATTGACCAAGCATGTCTCA  
 CCACTGATAGGACGTTTTGTTCCCTTTGCTGCCGTAGCTGCTGCTAATTGCATTAATATT  
 CCATTAATGAGGCAAAGGGAACCAAAGTTGGCATTCCCGTCACGGATGAGAATGGGAAC  
 CGCTTGNGGGAGTCGGCGAACGCTGCGAAACAAGCCATCACGCAAGTTGTCGTGTCCAGA  
 ATTCTCATGGCAGCCCTGGCATGGCCATCCCTCCATTATTATGAACACTNTGNAANAG  
 AAAGCCTTNTGAAGAGTTCCCATGGATGAGTGACCCATTCAAGTTGGGNTTAGTTGGC  
 TTNCTGTTGGTGTGTTGCTACACCCTGTGATGTGCCCTGTTCTCTNAAAC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_022754 unedited  
 CTTTGGACCGGCGCCGATNCTAGNGATCGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTGCACCCCTTTTTTTTTTTTGGAGGAAATCAATC  
 TGGGCACATTGGCAGAAAAAAATCTACCCAACTAAAAAGTTCTATATTTTTTTTCATT  
 TACCAACTCTGAATACAAGGGTCTACCCTTTATGAAAAGGCACCCCTCAATATCCGGGGG  
 TGCTTGGGTCCAGGACCCCTCCGATACCAATATTTGGAGAAGCCCAAGTCTCGGTAT  
 AAAAAGGGCCAGGATTTGCATATAACCTAGGCCCCACCCCTGGATACTTGGTAAACAT  
 CTCTAAATTGGTTATAACACCCAATACAATGGAAGCCCTTTGGAAAAAGGTGATACCG  
 GATTGGGTTTTAAATTTGGATTATTTTCAACGGTAAGGAAATTTTTATCTTTTTAAAA  
 AAAATTTTAGGCCGGGGCGGGGGGTACGCTTGAATCCCCGACCTTGGGGGGGCCA  
 GGGGGCGGATCACCAGGGCCGAGATCGAGACCCAGGGGAACCCGTCTCTACTAAAA  
 ATACAAAAAATTAACCGGGCGGGGGGGGGGCGCCTGTAAATCCAGCTTTTCAAAAAGG  
 CTGGGGCAGGAAAACGGGTGAACCCACGAGGCGGAGCTTGCAAGTGAAGGAGAAATACCC  
 CCTGGACTTCAACCTGGGTGACCGAACGAGACTCCGGCCAAAAAAGGAGGAGGAGGAGG  
 TTTTCTCCCAACTTGGTTGGATTCCCAGATATAGAGCTCAAGGATCCCGAGGGGCCAC  
 TGGTTTGACGTTAAACTTACAGGAGTGAACCAACGGGCTATTAAATATTATTTTGAA  
 CCCTCCGGGGATGAACGCGGGCCAGGTTATTATTTCAAGGAGGAGGCCCCCTAATTTT  
 CGGAAATCCTG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_022754

**Insert Size:**

3000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>                                                                                                                                                              |
| <b>RefSeq:</b>                | <u>NM_022754.4, NP_073591.2</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>RefSeq Size:</b>           | 2986 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RefSeq ORF:</b>            | 969 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Locus ID:</b>              | 94081                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>UniProt ID:</b>            | <u>Q9H9B4</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cytogenetics:</b>          | 5q35.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Domains:</b>               | Mtc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Families:</b>      | Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Summary:</b>          | <p>Mitochondrial serine transporter that mediates transport of serine into mitochondria, an important step of the one-carbon metabolism pathway (PubMed:30442778). Mitochondrial serine is converted to glycine and formate, which then exits to the cytosol where it is used to generate the charged folates that serve as one-carbon donors (PubMed:30442778). Transports both D-serine and L-serine (PubMed:30442778). Also able to transport other amino-acids, such as alanine (PubMed:30442778). May be indirectly involved in the transport of a component required for iron utilization into or out of the mitochondria (By similarity). [UniProtKB/Swiss-Prot Function]</p> |