

## Product datasheet for **SC120073**

### Frataxin (FXN) (NM\_000144) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Frataxin (FXN) (NM_000144) Human Untagged Clone
Tag:	Tag Free
Symbol:	Frataxin
Synonyms:	CyaY; FA; FARR; FRDA; X25
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>SC120073 representing NM_000144. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
CGTGGCCTGCGCACCGACATCGATGCGACCTGCACGCCCCGCCGCAAGTTCGAACCAACGTGGCCTC
AACCAGATTTGGAATGTCAAAAAGCAGAGTGTCTATTTGATGAATTTGAGGAAATCTGGAACCTTTGGGC
CACCCAGGCTCTCTAGATGAGACCACCTATGAAAGACTAGCAGAGGAAACGCTGGACTCTTTAGCAGAG
TTTTTTGAAGACCTTGCAGACAAGCCATACACGTTTGAGGACTATGATGTCTCCTTTGGGAGTGGTGTC
TTAACTGTCAAACCTGGGTGGAGATCTAGGAACCTATGTGATCAACAAGCAGACGCCAAACAAGCAAATC
TGGCTATCTTCTCCATCCAGTGGACCTAAGCGTTATGACTGGACTGGGAAAACTGGGTGTACTCCCAC
GACGGCGTGTCCCTCCATGAGCTGCTGGCCGAGAGCTCACTAAAGCCTTAAAAACCAAACCTGGACTTG
TCTTCCTTGGCCTATTCCGAAAAGATGCTTGA
```



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000144 unedited  
 GTCAGCATTTGTATACGACTCCTATAGGCGGCNCGCGATTTCGGCAGGACCGGACAGCAT  
 GTGGACTCTCGGGCGCCGCGCAGTAGCCGGCCTCCTGGCGTCACCCAGCCCGGCCAGGC  
 CCAGACCTCACC CGGTCCC GCGCGG CAGAGTTGGCCCCACTCTGCGGCCGCGTGG  
 CCTGCGCACCGACATCGATGCGACTGCACGCCCGCCGCAAGTTCGAACCAACGTGG  
 CCTCAACCAGATTTGGAATGTCAAAAAGCAGAGTGTCTATTTGATGAATTTGAGGAAATC  
 TGGAACTTTGGGCCACCCAGGCTCTCTAGATGAGACCACCTATGAAAGACTAGCAGAGGA  
 AACGCTGGACTCTTTAGCAGAGTTTTTTGAAGACCTTGCAGACAAGCCATACACGTTTGA  
 GGACTATGATGTCTCCTTTGGGAGTGGTGTCTTAACTGTCAAACCTGGGTGGAGATCTAGG  
 AACCTATGTGATCAACAAGCAGACGCCAAAACAAGCAAATCTGGCTATCTTCTCCATCCAG  
 TGGACCTAAGCGTTATGACTGGACTGGGAAAACTGGGTGACTCCCACGACGGCGTGTG  
 CCTCCATGAGCTGCTGGCCGAGAGCTCACTAAAGCCTTAAAAACCAAACCTGGACTTGTG  
 TTCCTTGGCCTATTCCGAAAAGATGCTTGATGCCAGCCCGTTTTAAAGACATTANAA  
 GCTATCAGGCCAAGACCCAGCTTCATTATGCAGCTNGAGTCTGGTTTTTGGTGGTGGTG  
 TTTATTTTTTTTTATTCTGCTNTTGAGGGACAGTGGGCTATGTGTCACAGCTCTGTAGAA  
 GAATGTGTNGCCTNCTACCTGCCCCAGTCTGATTTTAAATTCTATGGAGATTTTTGGG  
 ATGTGATTTCTCCTNACATGAACCC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_000144 unedited  
 CGTACACTGGACGCGGCCATCTANGATCGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTTTTTTTTATTATTATTATTATTTTATTGGTATTATTATTTTGAGACAG  
 AGATTTTGCTCAGTCACCCAGGTTACAGGGCAATGGCACGATCTCGGCCACTGGAACCT  
 CCACCTCTGGGGTCAAGCGATTCTTCCGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGC  
 CCCTGCCCTCATACCCGGTAATTTTTTGGATTTTAGTAAAGACGGGGTTTCATCATGT  
 TGGCCAGGCTGGTCTTGAACCTGACCTCAGGGGATCCACCCACCTTGGCCTCCAAAAG  
 TGCTGGGATTACCGGGTGAGCCACCGCCAGGCCAAGGATGGCTATTATTTTACCTG  
 AATTCCACTGAAATCACGATTGGGCAACACCCATAACAATGTTTCCTATATAGCTTAAAA  
 ACTGGTCTTTGTCATCCCTCATCTACCCATAGGGAATTAGAAGTACCTGGTAGGTTG  
 CTTGACCGGACCACTGAATGCTGGGAATCAACCATACCTATTCTCTCATTAAACAGATG  
 GGGAAACCGAGGTCCAGGGAATTTGGGAACTTGTCCACCAAGGGACAACACTTTGGGG  
 CTGAACTATGTCTAGGACCAGGGTCTCTTTATCAACATGAGTATCTCCCTCTTTATCG  
 GCCCTTTCTGTTTACAAGGCACCTCCCACTCCCTGGATTTTGTGTTGTCGCCCTCCCTC  
 CCTCCCTCATGAGAACGGCCTTTTTTCCCTTTCTTGGCCTGGGGAATTTTTGGC  
 CTCCTGGGGGCCACCGGTTCCAACCAACCCTTTAAAATGGGAAAAATT

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_000144

**Insert Size:**

633 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).

**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\\_000144.3](#)

**RefSeq Size:** 2262 bp

**RefSeq ORF:** 633 bp

**Locus ID:** 2395

**UniProt ID:** [Q16595](#)

**Cytogenetics:** 9q21.11

**Domains:** Frataxin\_Cyay

**Protein Families:** Druggable Genome

**MW:** 23.1 kDa

**Gene Summary:** This nuclear gene encodes a mitochondrial protein which belongs to the FRATAXIN family. The protein functions in regulating mitochondrial iron transport and respiration. The expansion of intronic trinucleotide repeat GAA from 8-33 repeats to >90 repeats results in Friedreich ataxia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2016]

Transcript Variant: This variant (1) encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.