

## Product datasheet for **SC111958**

### **PYROXD1 (NM\_024854) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PYROXD1 (NM_024854) Human Untagged Clone
Tag:	Tag Free
Symbol:	PYROXD1
Synonyms:	MFM8
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC111958 sequence for NM\_024854 edited (data generated by NextGen Sequencing)

```

ATGGAGGCAGCGCCCTCCCCGACGGCAGGGAAGTTCGTGGTGGTCCGGCGCGGCATC
GCGGGCGTCACTTGTGCGGAGCAGTTGGCTACTCACTTTCCATCGGAAGATATTCTTTG
GTAACAGCTTCTCCTGTTATTAAGCAGTTACAAATTTCAAGCAGATTTCTAAAAATTG
GAAGAATTCGATGTTGAAGAACAATCAAGTACCATGTTAGGAAAACGCTTTCCCAACATT
AAGGTTATAGAATCTGGCGTAAAGCAACTGAAGAGTGAAGAACACTGCATTGTAACAGAA
GATGGCAATCAGCACGTATATAAGAAAACCTGTCTGTGTGCTGGAGCTAAACCAAAGTTG
ATATGTGAAGGAAATCCTTATGTATTAGGAATCCGTGATACAGACAGTGCCTCAGGAATTT
CAGAAACAGCTTACTAAAGCTAAAAGAATAATGATCATAGGGAACGGTGGTATTGCACTT
GAGTTAGTGTATGAAATTGAAGGCTGTGAAGTGAATTTGGGCCATTAAGATAAAGCTATA
GGGAATACTTTCTCGATGCAGGAGCAGCTGAATTCCTTGACTTCAAAGCTCATTGCTGAA
AAATCAGAGGCTAAAATGCACATAAAAGAACCAGATATACTGAAGGAAGGAAAAAG
GAAGCTAGAAGCAAATCTAAAGCAGATAATGTAGGAAGTGCATTGGGACCAGATTGGCAT
GAAGGCTTGAATCTTAAAGGAACAAAAGAGTTTTCTCATAAGATTCACCTTGAAACTATG
TGTGAAGTAAAGAAAATCTACCTTCAGGATGAGTTTAGAATTTTGAAGAAAAGTCCCTTC
ACTTTTCCAAGAGACCATAAGTCAGTTACAGCTGATACAGAGATGTGGCCTGTCTATGTG
GAATTGACCAATGAAAAGATATATGGCTGCGATTTTATTGTCAGTGTACAGGAGTTACA
CCAAATGTAGAACCTTTTCTCCATGGTAACAGTTTTGATCTAGGAGAAGATGGTGGCCTG
AAAGTGGATGATCATATGCACACATCCCTTCTGATATCTATGCTGCCGGTGACATCTGT
ACTACATCCTGGCAGCTGAGCCAGTCTGGCAGCAGATGAGGCTGTGGACCCAGGCTAGA
CAGATGGGATGGTATGCAGCAAAGTGCATGGCTGCAGCAGTTCAGGAGACTCTATTGAC
ATGGATTTACAGCTTTGAACTGTTTGTCTCATGTGACAAAAATTTTTAACTATAAGGTTGTA
CTGCTGGGAAAATACAATGCACAGGGCTTAGGTTAGATCATGAATTAATGCTGAGATGT
ACCAAAGGACGAGAATACATCAAAGTCGTATGCAAAATGGACGAATGATGGGAGCTGTC
TTAATTGGTGAACCGATTTAGAAGAAACATTTGAAAACCTAATCTTAAACCAAATGAAT
CTTTCATCATATGGAGAAGATCTGCTAGATCCAAATATTGATATAGAAGATTATTTTGAC
TAA
    
```

Clone variation with respect to NM\_024854.3

**5' Read Nucleotide Sequence:**

```

>OriGene 5' read for NM_024854 unedited
CAGTCAGATTTGTACTCGATCATATGGGCGGCCGCTGAATCGGCACGAGGCCTCGTGCCG
AATTCGGCAGCAGGCAGTAAACCACTGGGAGTCCGGCAGCATGGAGGCAGCGCCCTCC
CCCAGCGCAGGGAAGTTCGTGGTGGTCCGGCGCGGCATCGCGGGCGTCACTTGTGCGGA
GCAGTTGGTACTCACTTTCCATCGGAAGAGATTCTCTTGGTAACAGCTTCTCCTGTTAT
TAAAGCAGTTACAAATTTCAAGCAGATTTCTAAAATATTGGAAGAATTCGATGTTGAAGA
ACAATCAAGTACCATGTTAGGAAAACGCTTTCCCAACATTAAGGTTATAGAATCTGGCGT
AAAGCAAATGAAGAGTGAAGAACACTGCATTGTAACAGAAGATGGCAATCAGCACGTATA
TAAGAACTCTGTCTGTGTGCTGGAGCTAAACCAAAGTTGATATGTGAAGGAAATCCTTA
TGTATTAGGAATCCGTGATACAGACAGTGTCTCAGGAATTTAGAAAACAGCTTACTAAAGC
TAAAAGAATAATGATCATAGGGAACGGTGGTATTGCACTTGAAGTGTATGAAATTGA
AGGCTGTGAAGTGAATTTGGGCCATTAAGATAAAGCTATAGGGAATACTTTCTTCGATGC
AGGAGCAGCTGACATCTTGACTTCAAAGCTCATTGCTGAAAAATCAGAGGCTAAAATTGC
ACATAAAAGAACCTGATATACTACTGAAGGCAGGACAAAAGGAAGCTAGTACGCANATCT
AAAGCAGATAATGTAGGACGTGCATTTGGACCGCACTGCATGACGCTTGATCTTACAGA
ACTAAAGAGTTCTCATACGATCACTTTGAAGTGTGTGAGTAAAGAGATCTACCTCNNGA
TGAGTTAGATTTGAGAGCAGCCTCCT
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_024854 unedited NCTTTCTATGNNACCGCGGCCGCATTTCTANGATCGAGTTTTTTTTTTTTTTTTTTGTAG GCTGAATCGTCTCAAACCTGTCATTCTGAACAAGGTGATAAAAAGATGGAGGAAAAAAT CAGGCAACTTCCAGAAGAAGGCTGCAAACATGCTTCAGCAATCTGGTTCTAAGAATACAG GAGCTAAGAAAAGAAAAATCGATGATGCCTGATATGAATGTTACTAAATTTTCTAATTAA AGATGGTTTATGCATGTATATGCCATTATTTTGTAGTTAGACAATAGTTTTTAAAGAA TTTCATAGATATTTTATATGTATGGATCTATATTTTCAGAGCTTATCTCTGAAGATCTAA ACTTTTGAGAATGTTTGAATAATAGAGATCATGAATTATATAATTTCCAGTATAAAACA AGGAAAAAATTTTATGTAAAACCTTTAAATGTAATAATTTGAGAATAAGTTCATACA ATCGTCTTAAGTTTTTTATGCCTTTATATACTTAGCTATATTTTTCTTTTGACATAACT ATCTTTTTGAAAGCAATATTATACTGACAGAGGCTCACTGAGTGATACTTTAAGTTAAAT ATGTAGATCAAGGATGTCCAATCTTTGGCTTCCCTGAGCCACATTGGAAGAAGAATTGT CTTGGGCCGCACATAAAATATGCTAACACTGATGATAGCTGATGAGCTTAAAAAATAAT TGCAAGAAAAATCTCATGTTTTAAGAAAGTTACAAAAATGTAATATTTGAGAAATAG TTCATGTAATTTGCCTAAGTTTTTATGCCTTTATATACTTAGCTATATTTNTTTCTTT TGACATAACCCATCTTTTTGAAAGCAATATTATACTGACAGAGGGTCACTGAGTGATACT TTAAGTAAATATGTAGATAGGGATGTCCAATCTTTGGCTTCTGAGCCCATGGNAGAA GAATGTCTTGGCCC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_024854
<b>Insert Size:</b>	3490 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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>	<a href="#">NM_024854.2</a> , <a href="#">NP_079130.2</a>
<b>RefSeq Size:</b>	3171 bp
<b>RefSeq ORF:</b>	1503 bp
<b>Locus ID:</b>	79912
<b>UniProt ID:</b>	<a href="#">Q8WU10</a>
<b>Cytogenetics:</b>	12p12.1
<b>Domains:</b>	pyr_redox

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a nuclear-cytoplasmic pyridine nucleotide-disulphide reductase (PNDR). PNDRs are flavoproteins that catalyze the pyridine nucleotide-dependent reduction of thiol residues in other proteins. The encoded protein belongs to the class I pyridine nucleotide-disulphide oxidoreductase family but lacks the C-terminal dimerization domain found in other family members and instead has a C-terminal nitrile reductase domain. It localizes to the nucleus and to striated sarcomeric compartments. Naturally occurring mutations in this gene cause early-onset myopathy with internalized nuclei and myofibrillar disorganization. A pseudogene of this gene has been defined on chromosome 11. [provided by RefSeq, Apr 2017]

Transcript Variant: This variant (1) encodes the longest 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.