

## Product datasheet for **MC220981**

### **Yme111 (NM\_013771) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Yme111 (NM_013771) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Yme111
Synonyms:	Ftsh; FtsH1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**Fully Sequenced ORF:** >MC220981 representing NM\_013771  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTCTCCCTGTCGAGCACTGTGCAGCCTCAGGTTACAATTCCTCTCAGTCATCTCATCAATGCTTTCC  
 ATTCACCAAAAAATATATCTGTTTCTGTCAATACACCTGTTTCTCAAAAACAGCATCGAGATACAGTTCC  
 TGAGCATGAAGCTCCCAGTAGTGAGCCTGTGCTTAATTTAAGGGACCTGGATTATCTGAATTGAAAATT  
 GGACAGATTGATAAAATGGTAGAAAATTTACTTCTGGATTTTATAAAGACAAAAGAGTTTCTTCTGTT  
 GGCATACATCTCATATTTCCGGCACAGTCTTTTTGAAAAATAATATGGTCACTTAGATATGTTCACTAC  
 ATTACGTTCTCTAGCTTGTACAGGCAACATCCAAAACTCTCGAAGCATTGTTTCAGATCTTCAGTAT  
 TTTCCAGTTTTCATACAGTCTCGGGTTTCAAACGTTGAAATCAAGGACAGCAGTTTGCAGTCTACCT  
 CTGAAAGATTAGTAGAAGCACAGAATATAGCACCATCATTGTGAAGGGTTTCTTTGCGGGACAGAGG  
 AACAGATCTTGAGAGTTGGACAACTTATGAAAATAAAAACATACCTGAAGCTACCAAGATGCATTT  
 AAAACTGGTTTTGCAGAGGGTTTTCTCAAAGCTCAAGCTTTACACAGAAGACCAATGATTCCTTAAGGC  
 GAACTCGTCTGATCCTCTTTGTTTTGCTCCTGTTTGGCATTATGGACTCTTAAAAAATCCGTTTTTATC  
 TGTGCGCTTTCCGACAACACAGGACTTGATTCTGCGGTAGACCCTGTCCAGATGAAAAATGCACTTTT  
 GAACATGTTAAAGGGGTGGAGGAAGCCAAACAAGAGTTACAGGAAGTGGTTGAATTTTGA AAAATCCAC  
 AGAAGTTTACTGTGCTTGGAGGTAAGTTCCCAAAGGAATTTTATAGTTGGGCCACCAGGAACAGGGAA  
 GACGCTTCTTGCCGAGCTGTGGCAGGAGAAGCTGACGTCCTTTTTATTATGCTTCTGGATCAGAGTTT  
 GATGAGATGTTTTGCGGCTAGGAGCCAGCAGGATCAGAAATCTTTTAGAGAAGCAAAAGCAAAATGCTC  
 CTTGTATATTCATCGATGAATTAGATTCTGTTGGTGGAAAGAGAATGAATCTCCAATGCACCCGTA  
 TTCAAGGCAGACGATCAATCAGCTTCTTGCTGAAATGGATGGTTTTCAAACCAATGAAGGAGTAATCATT  
 ATAGGTGCCACAATTTCCAGAGGCATTAGATAATGCCTTAATACGTCCTGGTCTTTTATGATGCAAG  
 TTACAGTTCCAAGGCCAGATGTGAAGGGTGAAGTGAATTTTGAATGGTATCTCAACAAGATAAAGTT  
 TGATAAATCTGTTGATCCAGAAATCATAGCTCGAGGGACTGTTGGGTTCTCTGGAGCAGAGTTGGAGAAT  
 CTTGTGAACCAAGCTGCACTAAAGGCAGCAGTTGATGAAAAGAAATGGTTACCATGAAGGAACTAGAGT  
 TTTCCAAGGATAAAAATCTAATGGGACCAGAAAGAAGTGTGGAAATGATAACAAAAACAAAATCTAT  
 AACAGCCTATCATGAATCTGGTCATGCTATTATGCATATTACACAAAGGATGCAATGCCAATTAATAAA  
 GCTACAATCATGCCTCGAGGGCCAACTTGGGCATGTACTGTTGCCTGAGAATGACAGATGGAAATG  
 AAACCTCGAGCCCAGCTGCTTGACAGATGGATGTTAGCATGGGAGGAAGAGTGGCAGAGGAACTCATATT  
 TGGAACTGATCATATTACAACCTGGTCTCTAGTGATTTTGATAATGCAACAAAAATGCTAAGAGGATG  
 GTTACCAATTTGGAATGAGTGAAGGCTTGGAGTTATGACCTACAGTGATACAGGAAAATAAGTCCTG  
 AAACCTCAATCAGCCATTGAACAAGAAAATAAGAAATCCTTCTACGGGAGTCATATGAACGAGCAAAACATAT  
 CTTGAAAACACATGCGAAAGAACATAAGAACCTGGCAGAAGCATTGCTGACCTATGAGACTTTGGATGCC  
 AAAGAGATTCAAATGTTCTTGAGGGAAAGAAATGGAAGTGAGATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_013771  
**Insert Size:** 2148 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).

<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>	<u><a href="#">NM_013771.5</a></u> , <u><a href="#">NP_038799.1</a></u>
<b>RefSeq Size:</b>	4571 bp
<b>RefSeq ORF:</b>	2148 bp
<b>Locus ID:</b>	27377
<b>UniProt ID:</b>	<u><a href="#">O88967</a></u>
<b>Cytogenetics:</b>	2 A3
<b>Gene Summary:</b>	ATP-dependent metalloprotease that catalyzes the degradation of folded and unfolded proteins with a suitable degron sequence in the mitochondrial intermembrane region (By similarity). Plays an important role in regulating mitochondrial morphology and function by cleaving OPA1 at position S2, giving rise to a form of OPA1 that promotes maintenance of normal mitochondrial structure (PubMed:17709429, PubMed:24616225, PubMed:26785494, PubMed:27495975). Ensures cell proliferation, maintains normal cristae morphology and complex I respiration activity, promotes antiapoptotic activity and protects mitochondria from the accumulation of oxidatively damaged membrane proteins (By similarity). Required for normal, constitutive degradation of PRELID1 (PubMed:26785494). Catalyzes the degradation of OMA1 in response to membrane depolarization. Required to control the accumulation of nonassembled respiratory chain subunits (NDUFB6, OX4 and ND1) (By similarity). [UniProtKB/Swiss-Prot Function]