

Supplementary Materials

Table S1. Nanodrop analysis of total RNA (Figures 1, 2, and 5). Data are represented as mean ± SEM.

	Concentration (ng/µL)	260/280 ratio
hiPSC-WT (N=4)	438.00±16.57	2.06±0.01
hiPSC-A420P (N=4)	418.75±29.78	2.06±0.01
iCM-WT (N=4)	374.50±69.48	2.04±0.03
iCM-A420P (N=4)	441.75±34.67	2.05±0.01

Table S2. Primer sequences used in RT-qPCR.

Primer Name	Primer Sequence (5'→3')
Human <i>HPRT1</i> Forward	TGGACAGGACTGAACGTCTT
Human <i>HPRT1</i> Reverse	TCCAGCAGGTAGCAAAGAA
Human <i>MYH6</i> Forward	CTCCGTGAAGGGATAACCAGG
Human <i>MYH6</i> Reverse	TTCACAGTCACCGTCTTCCC
Human <i>TNNT2</i> Forward	CTGCTGTTCTGAGGGAGAGC
Human <i>TNNT2</i> Reverse	CACCAAGTTGGGCATGAACG
Human <i>SOD1</i> Forward	ACTGGTGGTCCATGAAAAAGC
Human <i>SOD1</i> Reverse	GGGCGATCCCAATTACACCA
Human <i>NFE2L2</i> Forward	AGGTTGCCACATTCCCAA
Human <i>NFE2L2</i> Reverse	ACGTAGCCGAAGAACCTCA
Human <i>HMOX1</i> Forward	CTCTACCGCTCCGCATGAAC
Human <i>HMOX1</i> Reverse	AAGCCCTGGTGCCCCGTGAG
Human <i>NOX4</i> Forward	GGGAAGAGGTCAATTCCGTGA
Human <i>NOX4</i> Reverse	GAGCCAGATGAACCCAAGCA

Table S3. Volumes and concentrations of injections for Seahorse analysis, with final concentrations in parentheses.

Mito Stress Test	
Injection 1	20 µl of 25 µM Oligomycin (2.5 µM)
Injection 2	22 µl of 20 µM FCCP (2.0 µM)
Injection 3	25 µl of 5 µM Rotenone/Antimycin A (5 µM)

Video S1: Beating iCM-WT.

Video S2: Beating iCM-A420P.