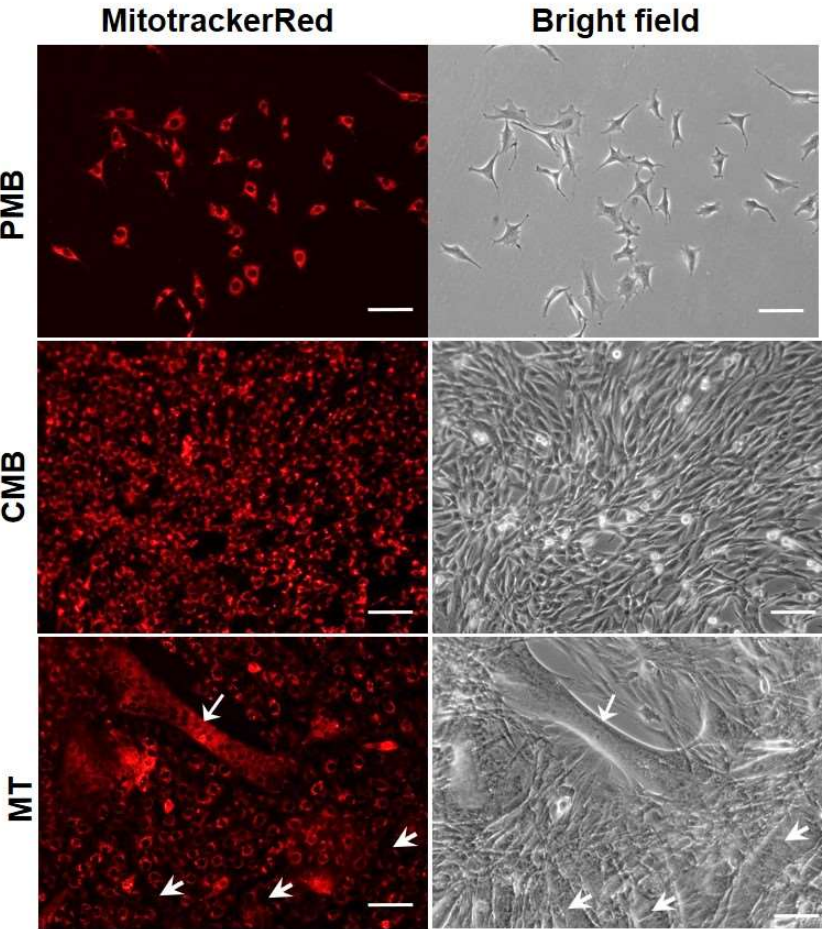
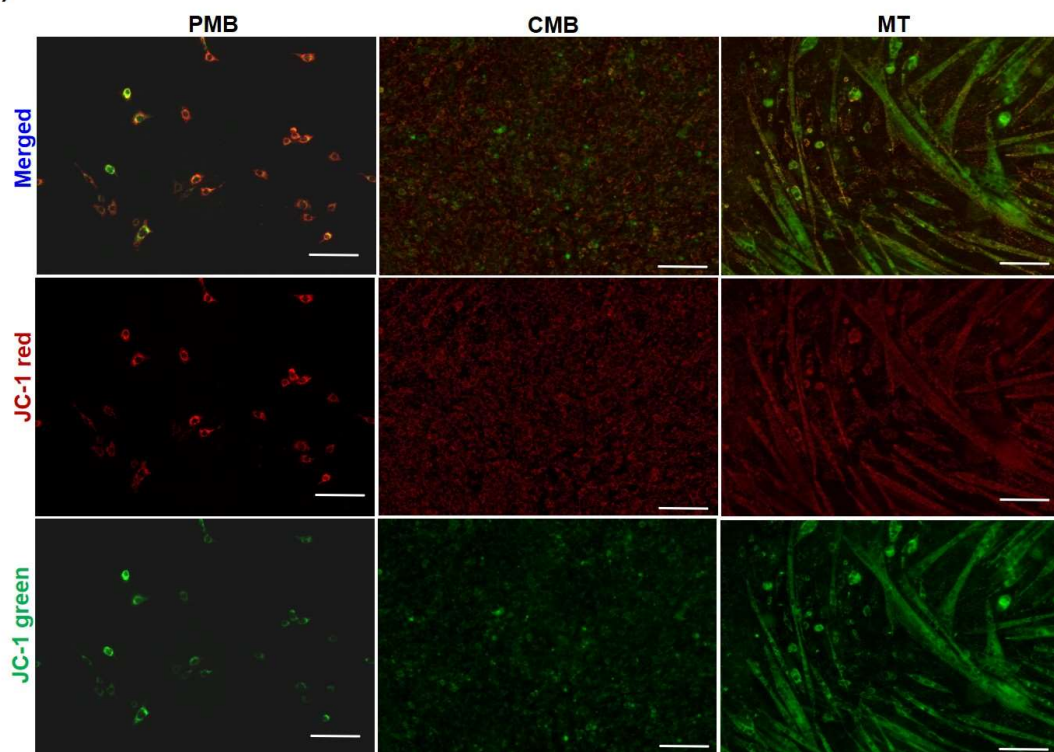


Supplementary Materials

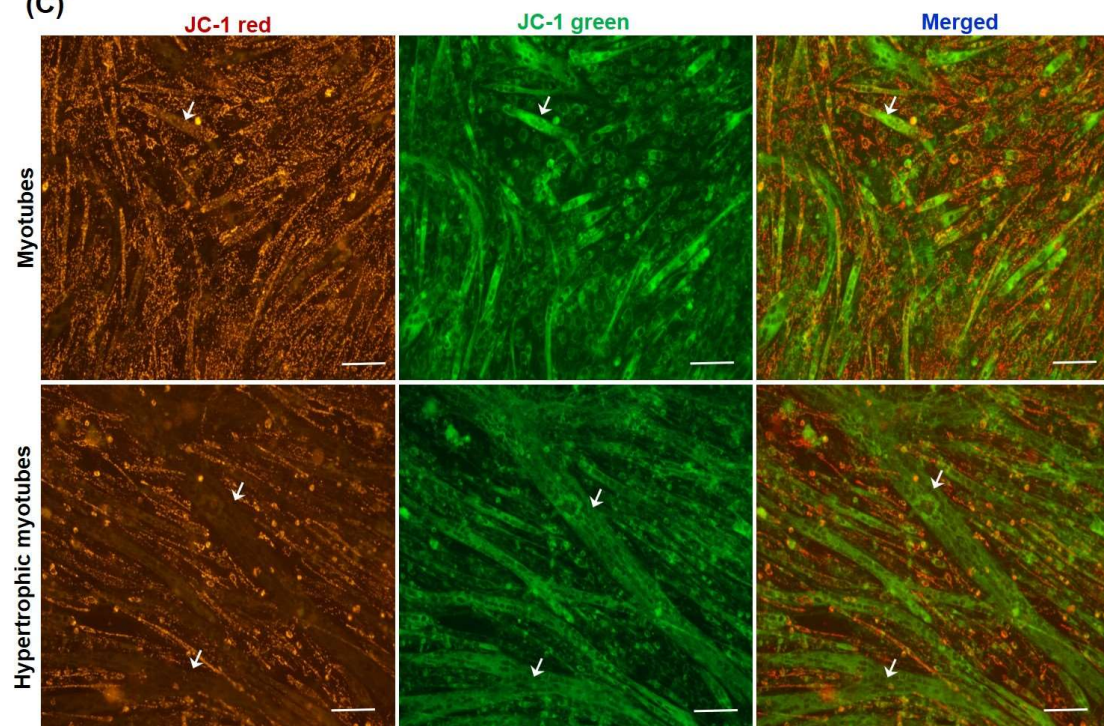
(A)



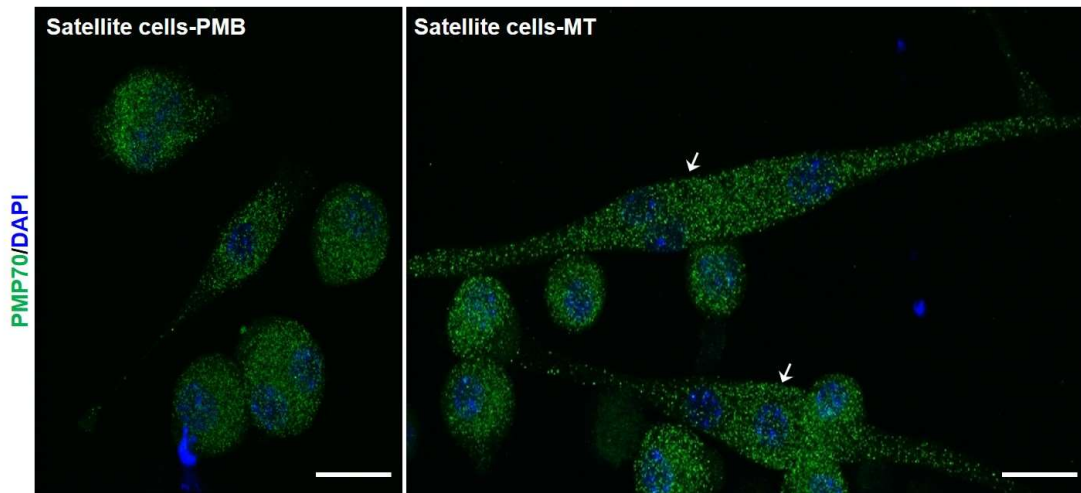
(B)



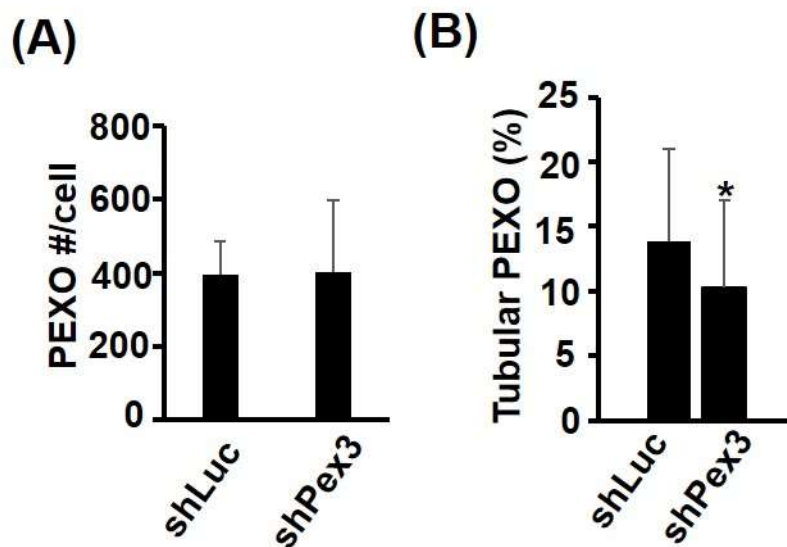
(C)



(D)



Supplementary Figure S1: The images of MITO and PEXO stained with fluorescent dyes. C2C12 myoblasts at proliferating myoblast (PMB), confluent myoblast (CMB), and differentiated myotube (MT) stages were treated with Mito Tracker-Red CMXRox (50 ng/ml, 30 min) or JC-1 (2 μ M, 30 min) fluorescent dye and their MITO morphology is shown in (A) and (B), respectively. (C) JC-1 stained myotubes (top panel) and hypertrophic myotubes (lower panel) were viewed and photographed under high resolution microscope and camera to see the JC-1 red aggregates. (D) Confocal microscope images of satellite cells. Scale bar: 100 μ m in (A) ~ (C) and 20 μ m in (D). Arrow: myotubes; arrow head: myotubes lacking Mito tracker staining.



Supplementary Figure S2: The alteration of PEXO in C2-shPex3 cells

The PEXO number and ratio of tubular PEXO in *Pex3* knockdown stable clones (C2-shPex3) are shown in **(A)** and **(B)**, respectively. n=20 for (A)~(B).

Supplementary Table S1: Primer sets used in the quantitative RT-PCR.

NCU Code	Gene Name	Primer Sequence ^a	Amplicon Size
000008 000009	<i>Mef2c</i>	FP: 5'- ccc atc aga ccg cct gtg tt -3' RP: 5'- gct ttg aga tgc cag tta cc -3'	184bp
000012 000013	<i>Mrf4</i>	FP: 5'- agc agt ctt cag cgc ctt tct -3' RP: 5'- atg ttc caa atg ctg gct gag t -3'	111bp
000053 000054	<i>COX1</i>	FP: 5'- cgc aat tcc tac cgg tga ca -3' RP: 5'- tga agc acg atg tca agg ga -3'	168 bp
001056 001057	<i>COX2</i>	FP: 5'-aac cga gtc gtt ctg cca ata g-3' RP: 5'-acc ctg gtc ggt ttg atg tta c-3	154 bp
003024 003025	<i>MyoD</i>	FP: 5'- ggc tac gac acc gcc tac ta -3' RP: 5'- gtt ctg tgt cgc tta ggg at -3'	204 bp
006003 006004	<i>MyHCIIb</i>	FP: 5'- gcc gag caa gag cta ctg gat -3' RP: 5'- tgt tga tga ggc tgg tgt tct g -3'	74 bp
006005 006006	<i>MyHCXII</i>	FP: 5'- tgc caa ggg cct gaa tga -3' RP: 5'- gct tcc acc taa agg gct gtt -3'	104 bp
006012 006013	<i>Myogenin</i>	FP: 5'- cca gtg aat gca act ccc aca gc -3' RP: 5'- aga cat atc ctc cac cgt ga -3'	167 bp
014023 014024	<i>m36B4</i>	FP: 5'- gaa cgt ggg ctt cgt gtt ca -3' RP: 5'- ctc gac aca gcc gca ctc ttc -3'	167 bp
015052 015053	<i>Myf5</i>	FP: 5'- tgc acc acc acc aac cct aa -3' RP: 5'- cag ggc tgt tac att cag g -3'	196 bp
029086 029087	<i>Prdm16</i>	FP: 5'- gca tat cca cag cag gg -3' RP: 5'- cga tgc ttg ttg agg g-3'	171 bp
029088 029089	<i>PGC-1α</i>	FP: 5'- cgt gac cac tga caa cga g -3' RP: 5'- ctg cat ggt tct gag tg-3'	164 bp
029116 029117	<i>MCAD</i>	FP: 5'-agc tga ttg gca atg tct cc-3' RP: 5'-gat cgc aat ggg tgc ttt tg-3'	291 bp
037021 037022	<i>Cat</i>	FP: 5'- aga tga agc agt gga agg ag -3' RP: 5'- ctc tca gga atc cgc tct -3'	184 bp
041044 041045	<i>Pex11β</i>	FP: 5'- ctt tgc aga gac atg ggg cta gt -3' RP: 5'- gag cta gcc cag act ttc cag cc -3'	243 bp
041050 041051	<i>Acox1</i>	FP: 5'- aca gtg ctg tga ggc gcc agt ct -3' RP: 5'- aaa agc ctt cag ccc agc -3'	233 bp
041075 041076	<i>Pex19</i>	FP: 5'- cca gag tca cca gga ctc ca -3' RP: 5'- ggc cca agg cct gta act -3'	179 bp
041081 041082	<i>Pex16</i>	FP: 5'- cct ccg cta cca gga gta tg -3' RP: 5'- aca gcg aca cag gca act tt -3'	209 bp
041085 041086	<i>Pex3</i>	FP: 5'- tcg ctg ctc cgc tct agt cc -3' RP: 5'- gca tct cca gac ccc gtg tt -3'	197 bp

063001 063002	<i>Cpt1b</i>	FP: 5'- gaa gag atc aag ccg gtc atg g -3' RP: 5'- aag tct gtc tct ttg cct ggg a -3'	104 bp
063009 063010	<i>Ndufb8</i>	FP: 5'- gaa ctg ggg tga acc gat ac -3' RP: 5'- gca gca cgt aga ggg aag ga -3	225 bp
064001 064002	<i>EGFP</i>	FP: 5'- caa gat ccg cca caa cat cg -3' RP: 5'- gac tgg gtg ctc agg tag tg -3	120 bp
064003 064004	<i>MCK</i>	FP: 5'- aca tcg tcc aga gtg aag cc -3' RP: 5'- cca cag cac aga cag aca ct -3'	224 bp
066017 066018	<i>Nkx2.5</i>	FP: 5'- gac aaa gcc gag acg gat gg -3' RP: 5'- ctg tcg ctt gct tgc act tgt agc -3'	222 bp
071013 071014	<i>h/mPex3</i>	FP: 5'- gca gaa tac att gcc caa gc -3' RP: 5'- ctg cat taa ggc ctc tct cag -3'	111 bp
071044 071045	<i>Gata4</i>	FP: 5'- aaa tct aag acg cca gca ggt cc -3' RP: 5'- ctt gat ggg gcg cat ctc tt -3'	123 bp
033034 033035	<i>MyoD promoter</i> (nuclear DNA)	FP: 5'-cga cgc gtc ctc ctc tgt gct gcc tta-3' RP: 5'-cga cgc gtc ttt cag gct gtg cac-3	395 bp
021045 000003	<i>Oct4 promoter</i> (nuclear DNA)	FP: 5'-cga cgc gtc gag ggt gca gtg cca aca g-3' RP: 5'-gcg acg cgt ggg cac ccc gag ccg ggg g-3	348 bp
037029 037030	<i>Cytochrome b</i> (MITO DNA)	FP: 5'-tcc tat cag cca tcc ca-3' RP: 5'-gtt tga tcc tgt ttc gtg g-3	173 bp
001056 001057	<i>COX2</i> (MITO DNA)	FP: 5'-aac cga gtc gtt ctg cca ata g-3' RP: 5'-acc ctg gtc ggt ttg atg tta c-3	154 bp

^aFP: forward primer; RP: reverse primer

Supplementary Table S2: Primer sets used in Cloning.

NCU Code	Gene Name	Primer Sequence ^a	Amplicon Size
062007 062008	<i>Pex3</i> <i>promoter</i>	FP: 5'- ccg ctc gag cgg tgt acc tct ccc aac aga cct -3' RP: 5'- ccg ctc gag cgg cgc tta ctg atc cgg gac -3'	2692 bp
071001 071002	<i>Pex16</i> <i>promoter</i>	FP: 5'- ggt cct gtg ccc act acc t -3' RP: 5'- ctt ctc tct ccg ccc tga a -3'	4092 bp
071003 071004	<i>Pex19</i> <i>promoter</i>	FP: 5'- gtc tta gct tct gct ccc att g -3' RP: 5'- tct tac tgc ctc cga ctt gc -3'	4070 bp
071005 071006	<i>flag-HA-</i> <i>mEos4b-</i> <i>PTS1</i>	FP: 5'- atg gac tac aag gac gac gat g -3' RP: 5'- tca cag ctt gga tcg tct ggc att gtc - 3'	768 bp
071007 071008	<i>hPex3 CDS</i>	FP: 5'- atg ctg agg tct gta tgg aat -3' RP: 5'- tca ttt ctc cag ttg ctg agg ggt ac -3'	1122bp
TRCN0000126812	<i>shPex3</i>	5'- ccg gag cag cag tat tta tca agt act cga gta ctt gat aaa tac tgc tgc ttt ttt g -3'	18bp

^aFP: forward primer; RP: reverse primer