Delta-Like 1 Homolog Against Sarcopenia

150 4 Control CTX Myostatin mRNA (fold) CTX+DLK1 3 NS TA weight (mg) 100 P=0.054 P=0.098 2 50 1 0 0 Control CTX CTX+ Control CTX CTX+ Control CTX CTX+ Control CTX CTX+ DLK1 DLK1 DLK1 DLK1 B A Day 10 Day 5 Day 10 Day 5 NS 1.5 4 P=0.080 Control NS NS CTX Myogenin mRNA (fold) MyoD mRNA (fold) 3 CTX+DLK1 1.0 2 P = 0.0980.5 0 0 Control CTX CTX+ Control CTX CTX+ Control CTX CTX+ Control CTX CTX+ DLK1 DLK1 DLK1 DLK1 C D Day 5 Day 10 Day 5 Day 10 Ø CTX+DLK1 Control CTX

Supplemental Fig. S3. Effects of delta-like 1 homolog (DLK1) on muscle mass, muscular biomarkers, and ultrastructure of muscle in the cardiotoxin-induced muscle atrophy mouse model. (A) A graph showing tibialis anterior (TA) muscle weights. Graphs showing relative expression of mRNA for muscular biomarkers: (B) myostatin, (C) myogenin, and (D) myogenic differentiation (MyoD) in TA muscle (n=3-4 per each group). (E) Representative electron microscopic images of TA muscle ($3,000 \times$ magnification). Results are presented as mean ± standard error of the mean. Treatment groups were as follows: control=mice initially treated with intramuscular (IM) phosphate buffered saline (PBS) followed by intraperitoneal (IP) PBS once daily for 10 days; cardiotoxin (CTX)=mice initially treated with IM CTX (150 µL at 10 µM) followed by IP PBS once daily for 10 days; CTX+DLK1=mice initially treated with IM CTX (150 µL at 10 µM) followed by IP DLK1 (0.8 mg/kg/day) once daily for 10 days. NS, non-significant. ^aP<0.05 was considered statistically significant.

EnM