



Figure 1-figure supplement 1. Mitochondrial Ca^{2+} levels are higher in *sel-12* mutants. (A) Representative image of mito-GCaMP6 and mCherry expression (*takEx347*). Scale bar represents 10 μm . (B) Quantification of mitochondrial Ca^{2+} using animals expressing mito::GCaMP6 and mCherry in their mechanosensory neurons (*takEx415*). (C) Basal and (D) maximal respiration rates of wild type and *sel-12* mutant animals at day 8 of adulthood. (E) Mitochondrial fluorescence intensity measured in wild type and *sel-12(ty11)* animals expressing TOM20::GFP (*zclIs14*) (F) . Quantification of mitochondrial DNA copy number normalized to nuclear DNA copy number in wild type and *sel-12(ar131)*, *sel-12(ty11)* and *sel-12(ok2078)* animals. n = number of animals analyzed per genotype. Data are displayed as mean \pm SEM, and all comparisons have been made to wild type animals. ns $P > 0.05$, *** $P < 0.0001$ (Two-tailed T-test for B-E, one way ANOVA with Tukey test for F).