



Figure S1. Diminished muscle function is an outcome of *sin-3* deletion. (a) Movement rate in *sin-3;him-5* hermaphrodite and males is not significantly varied however the decline in movement rate in *him-5(e1490)* males is more pronounced as compared to *him-5(e1490)* hermaphrodites. Body bends are represented as strokes per minute. (b) Effect of *sin-3* deletion on pharyngeal pumping. The decline in pharyngeal activity with age depicted as pumping or contradictions /30 s is observed in *sin-3;him-5* hermaphrodites and males as compared to the *him-5(e1490)* and wildtype worms. The pharyngeal contractions over time remains unaffected in all the worms compared. (c) The quantification of the tracks measured as crests and troughs formed by *sin-3;him-5* hermaphrodites and males as compared to isogenic control *him-5* mutant and wild-type worms. (d) The velocity measured in mm/s for *sin-3;him-5* hermaphrodites and males as compared to isogenic control *him-5* mutant and wild-type worms (ns, non-significant; ** $p < 0.05$; **** $p < 0.001$ and denotes the comparison with respect to *him-5 (e1490)*; One-way ANOVA performed). At least 20 worms per strain were evaluated and the experiment was repeated thrice.