

Figure S1 Image of the individual worms captured in multiple droplets separately. Red arrows indicated the larval worm at L1 stage.



Figure S2 Comparison of the body length of N2 wild type worms cultured and grown in droplet and well plate at different stages. No significant difference was measured in the two groups. Error bars indicate the SEM (n=20, N=3).



Figure S3 Comparison of the percentage of N2 wild type worms at different stages cultured on plate and droplet chip over time. There is no significant difference on the growth rate of worms in plate and droplet culture.



Figure S4 Comparison of the stroke frequency of N2 worms in different stages cultured in droplet chip and well plate. No significant difference was observed on the mobility of worms between the two groups. Error bars indicate the SEM (n=20, N=3).