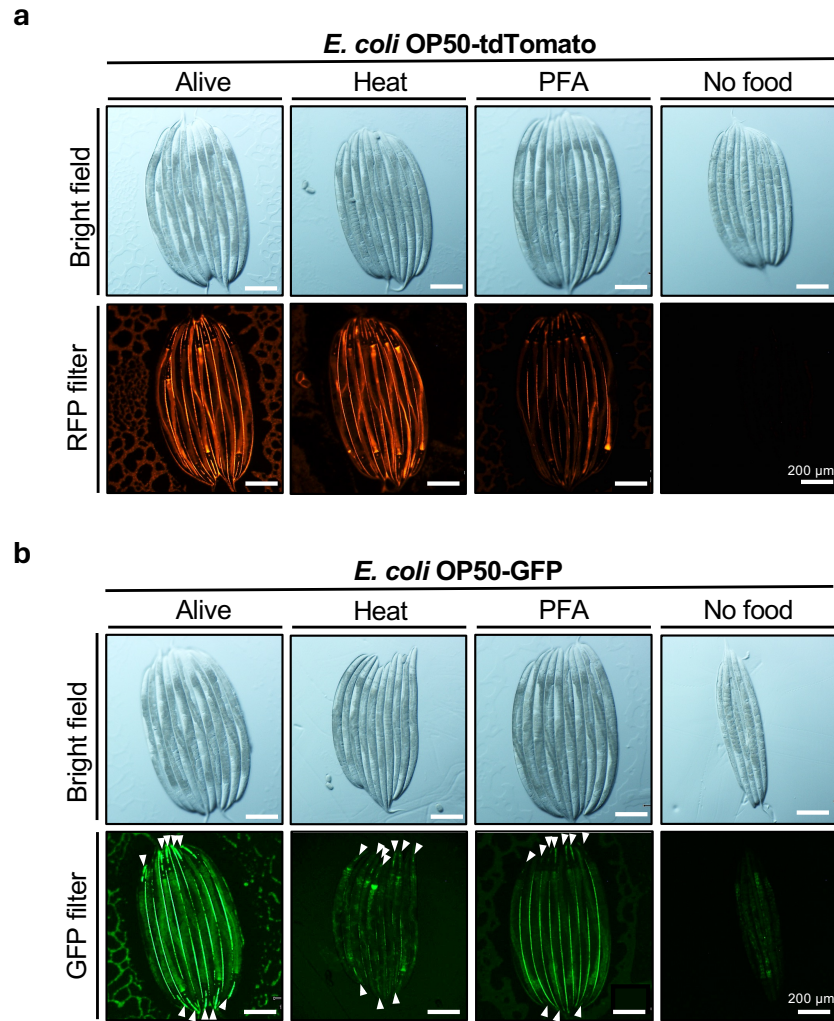
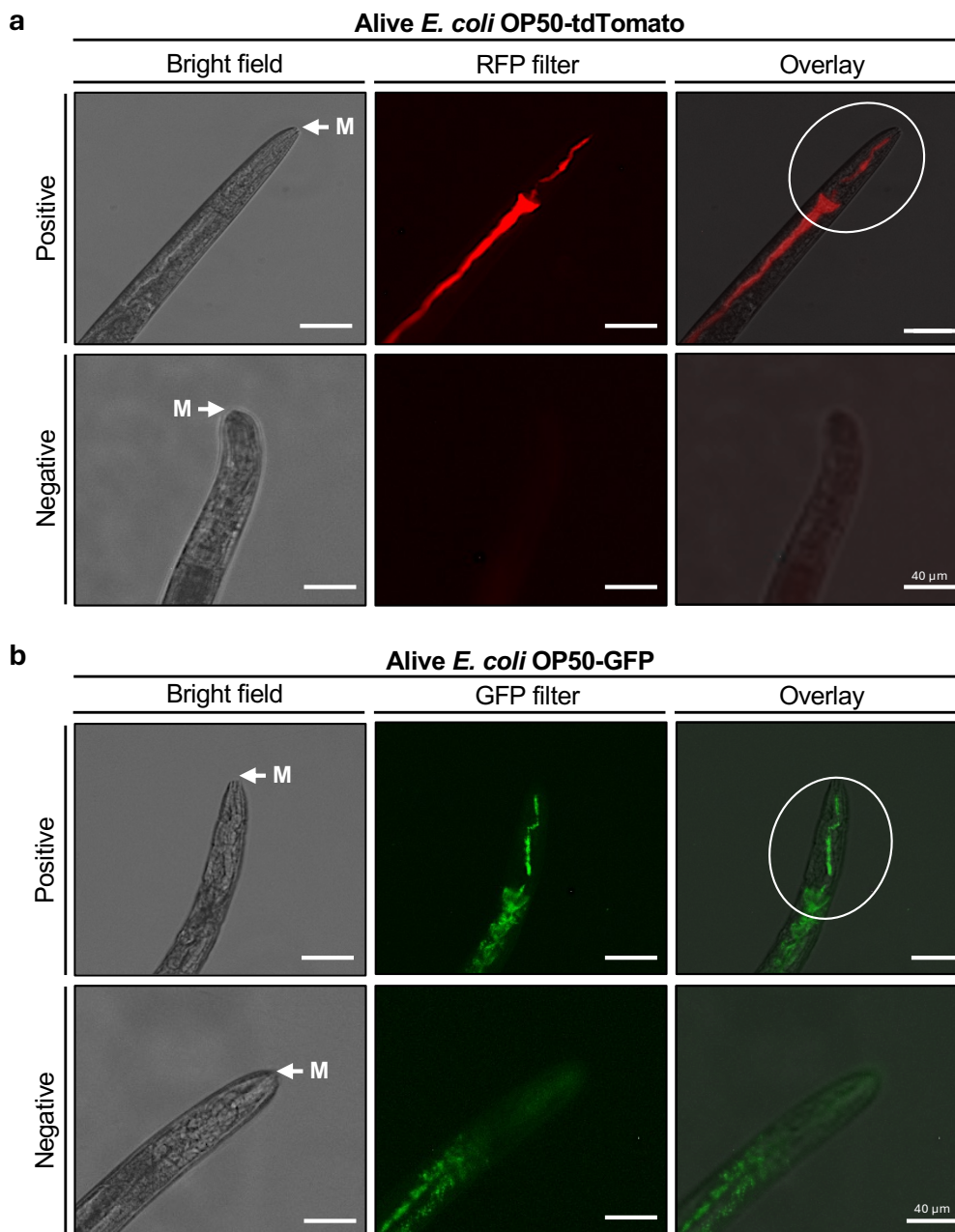




SUPPLEMENTARY Figure 1. Baseline fluorescence of *E. coli* OP50-GFP and tdTomato in *C. elegans*.

- (a) Images of worms fed either alive, heat-inactivated, or PFA-inactivated *E. coli* OP50-tdTomato for 24 hours or starved for 12 hours after 12 hours on food (no food).
- (b) Images of worms fed either alive, heat-inactivated, or PFA-inactivated *E. coli* OP50-GFP for 24 hours or starved for 12 hours after 12 hours on food (no food).

Magnification: 25X. Scale bar: 200 μ m. In worms fed *E. coli* OP50-GFP, each white arrows represent a worm with positive ingestion in the pharynx. Worms with positive OP50-tdTomato ingestion are entirely red.

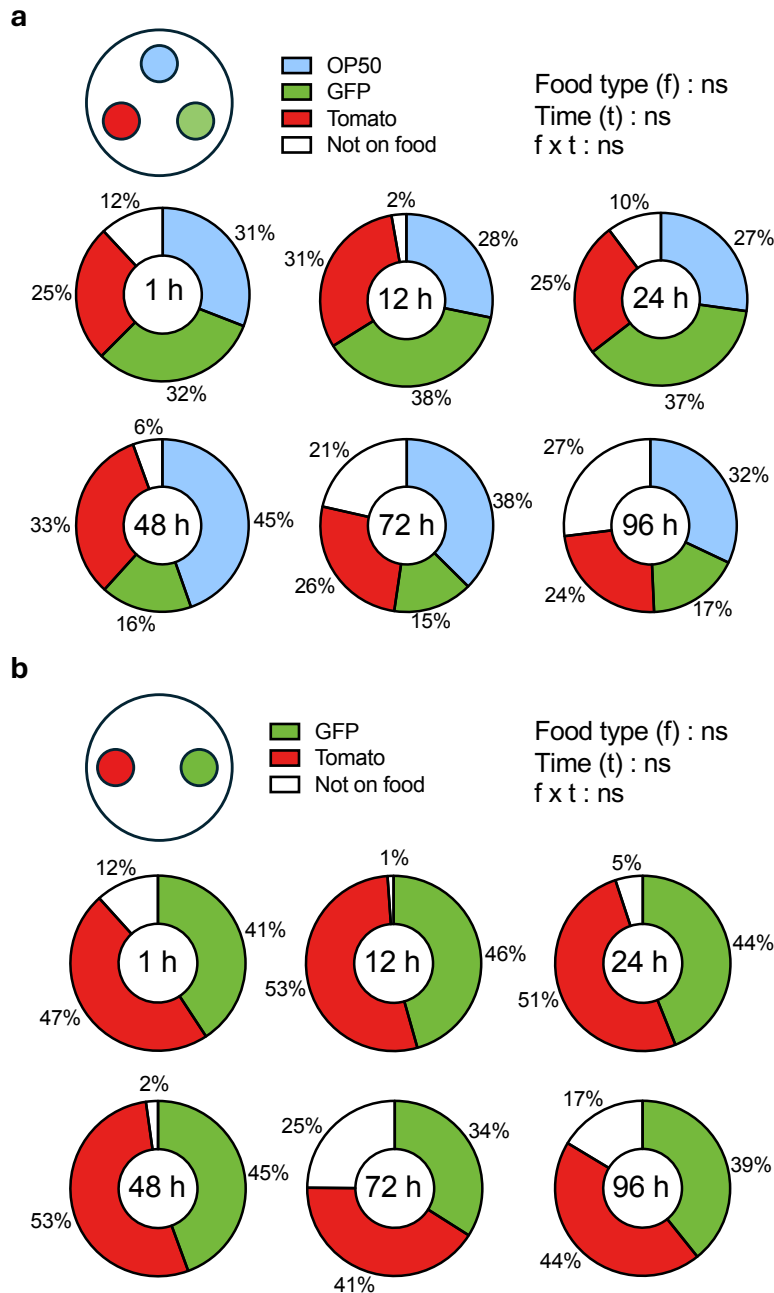


SUPPLEMENTARY Figure 2. Fluorescent *E. coli* OP50 in *C. elegans* pharynx.

(a) Images of N2 worm's pharynx after being fed alive *E. coli* OP50-tdTomato (red fluorescence) for 24 hours.

(b) Images of N2 worm's pharynx after being fed alive *E. coli* OP50-GFP (green fluorescence) for 24 hours.

Positive: GFP or RFP expressing *E. coli* OP50 found in the pharynx. Negative: No fluorescent bacteria in the pharynx
 Circled: fluorescent bacteria in worm's pharynx. M, mouth. Magnification : 100X. Scale bar : 40 μ m.



SUPPLEMENTARY Figure 3. Food preference assay using fluorescent *E. coli* OP50.

- (a) Food choices assay with three types of food: *E. coli* OP50, *E. coli* OP50-GFP and *E. coli* OP50-tdTomato. Worms were located and count after 1, 12, 24, 48, 72, 96 hours. n = 40 worms/ replicate for a total of 120 worms. Statistical analysis performed using a two-way ANOVA test.
- (b) Food choices assay with two types of food: *E. coli* OP50-GFP and *E. coli* OP50-tdTomato. Worms were located and count after 1, 12, 24, 48, 72, 96 hours. n = 40 worms/ replicate for a total of 120 worms. Statistical analysis performed using two-way ANOVA.