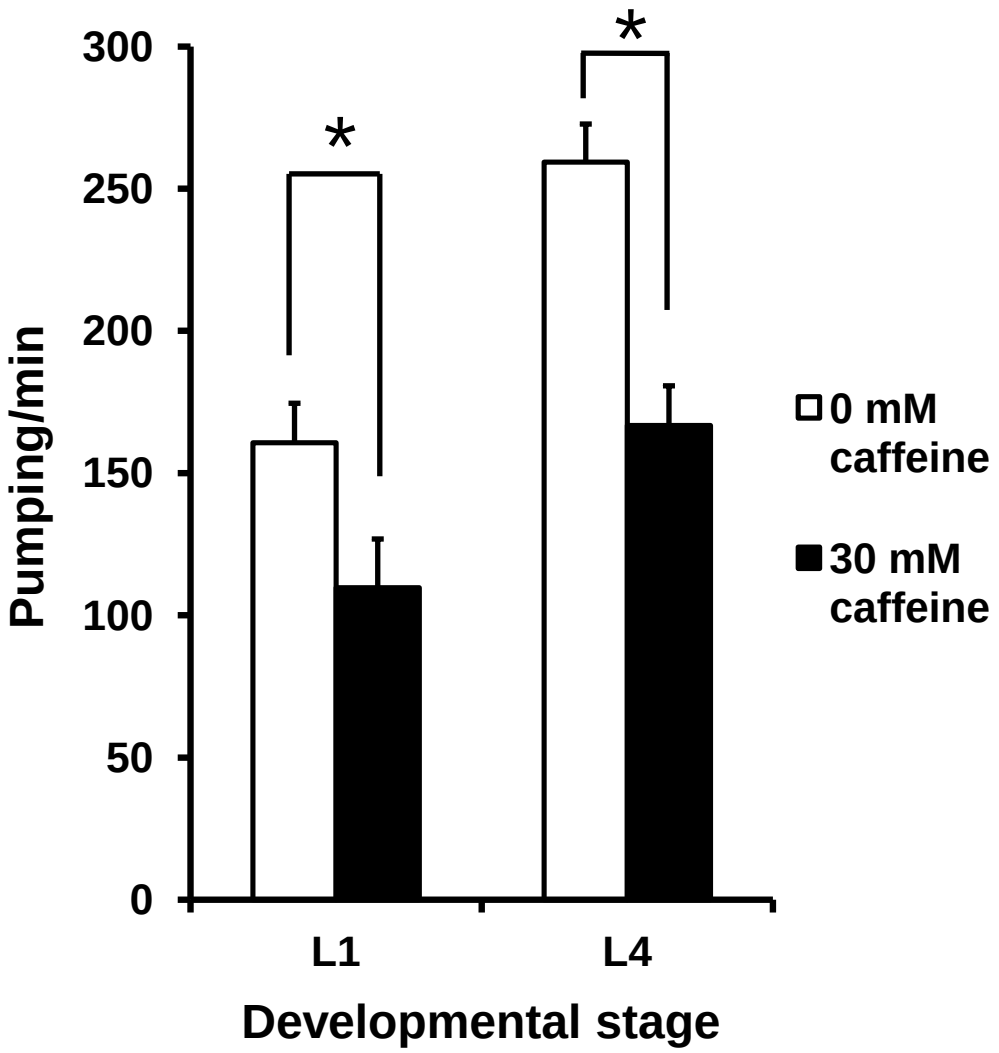
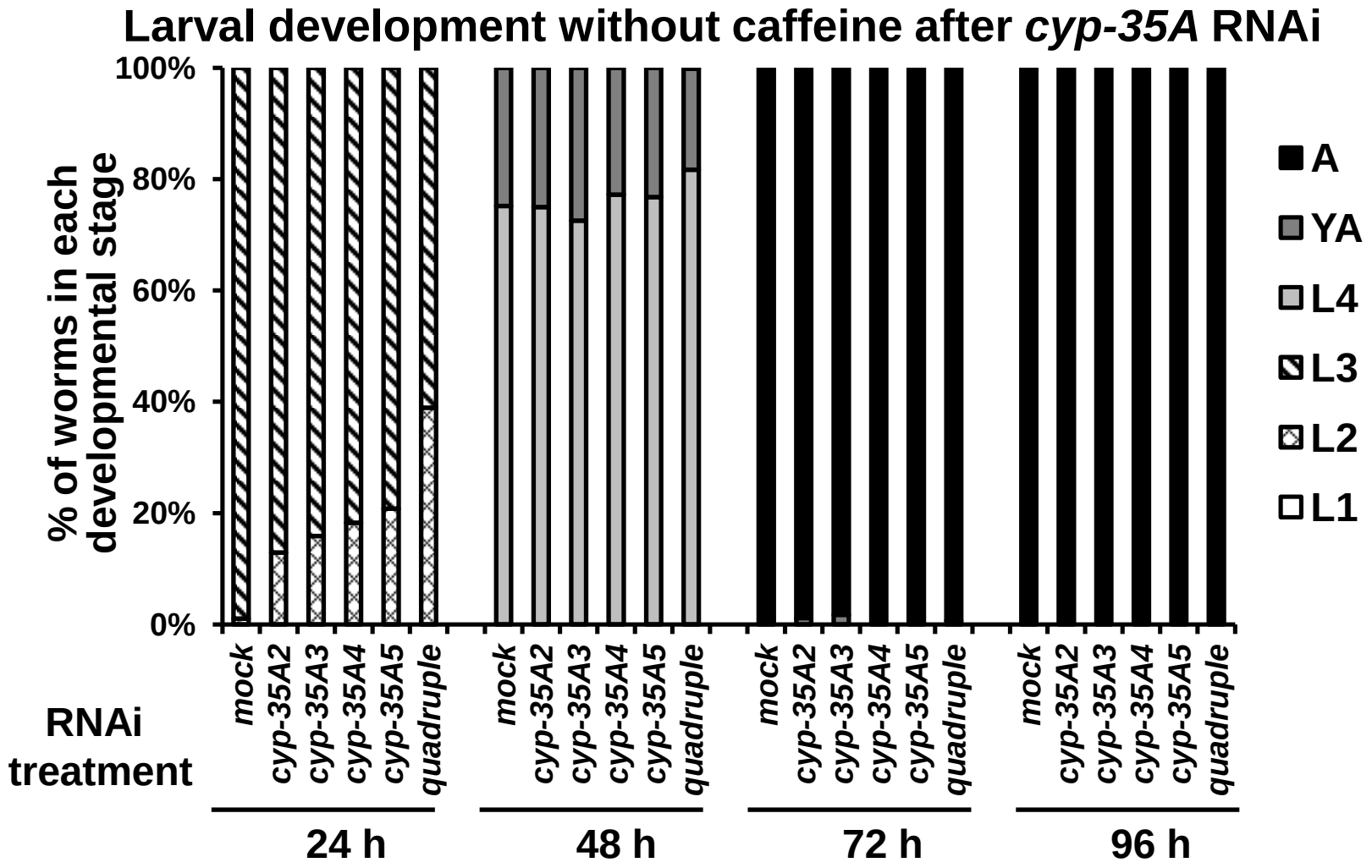
Fig. S1



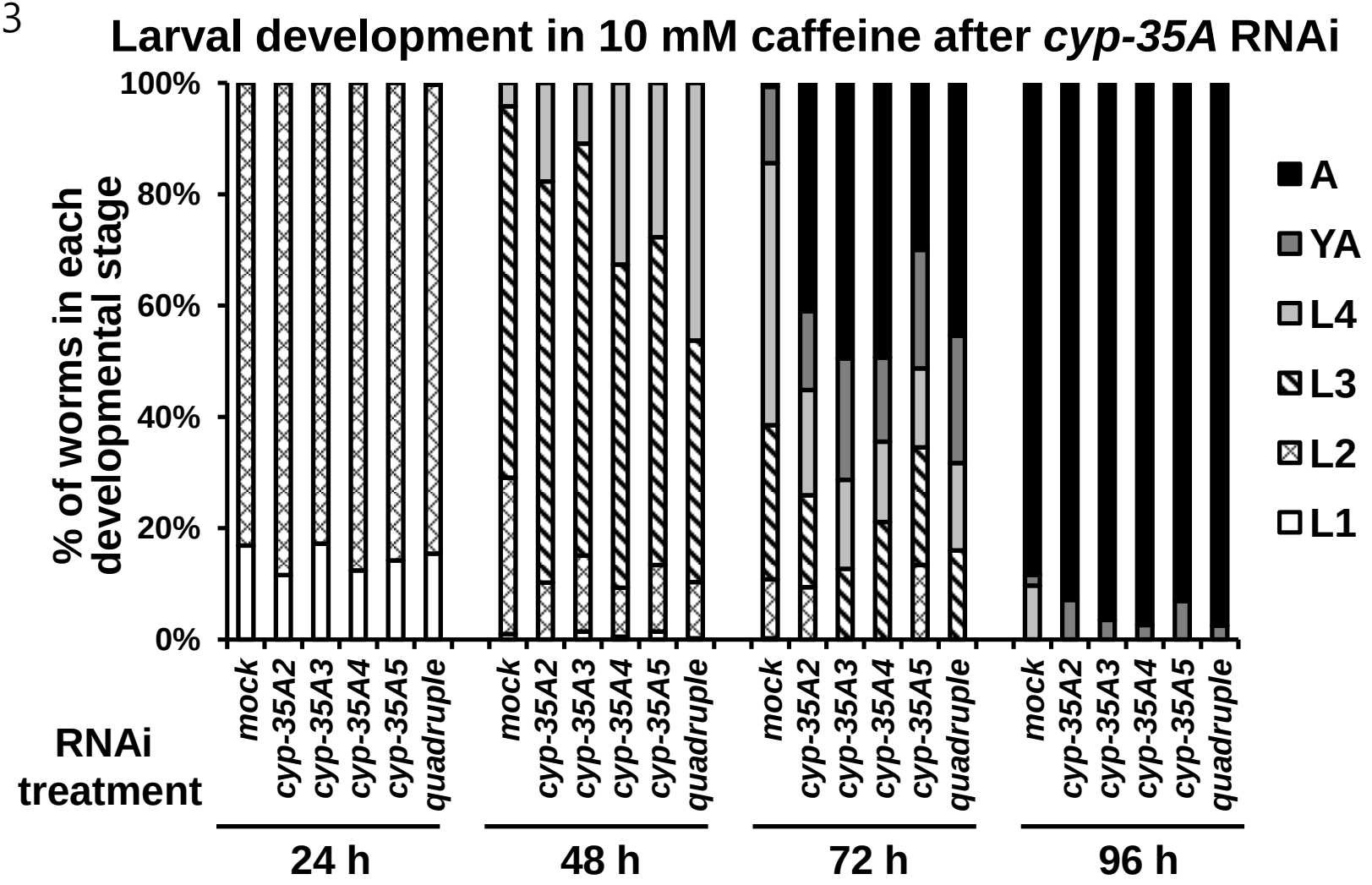
Supplemental Fig. S1. Pumping rate of larvae in the presence or absence of 30 mM caffeine. N2 worms at the L1 or L4 larval stage were cultured on normal NGM plates or 30 mM caffeine-containing NGM plates for 24 h at 20°C. Then their pumping rates were scored under Nomarski-DIC equipped microscope. 5 individuals were scored at the L1 stage and 10 individuals were scored at the L4 stage. *, $p < 0.05$.

Fig. S2



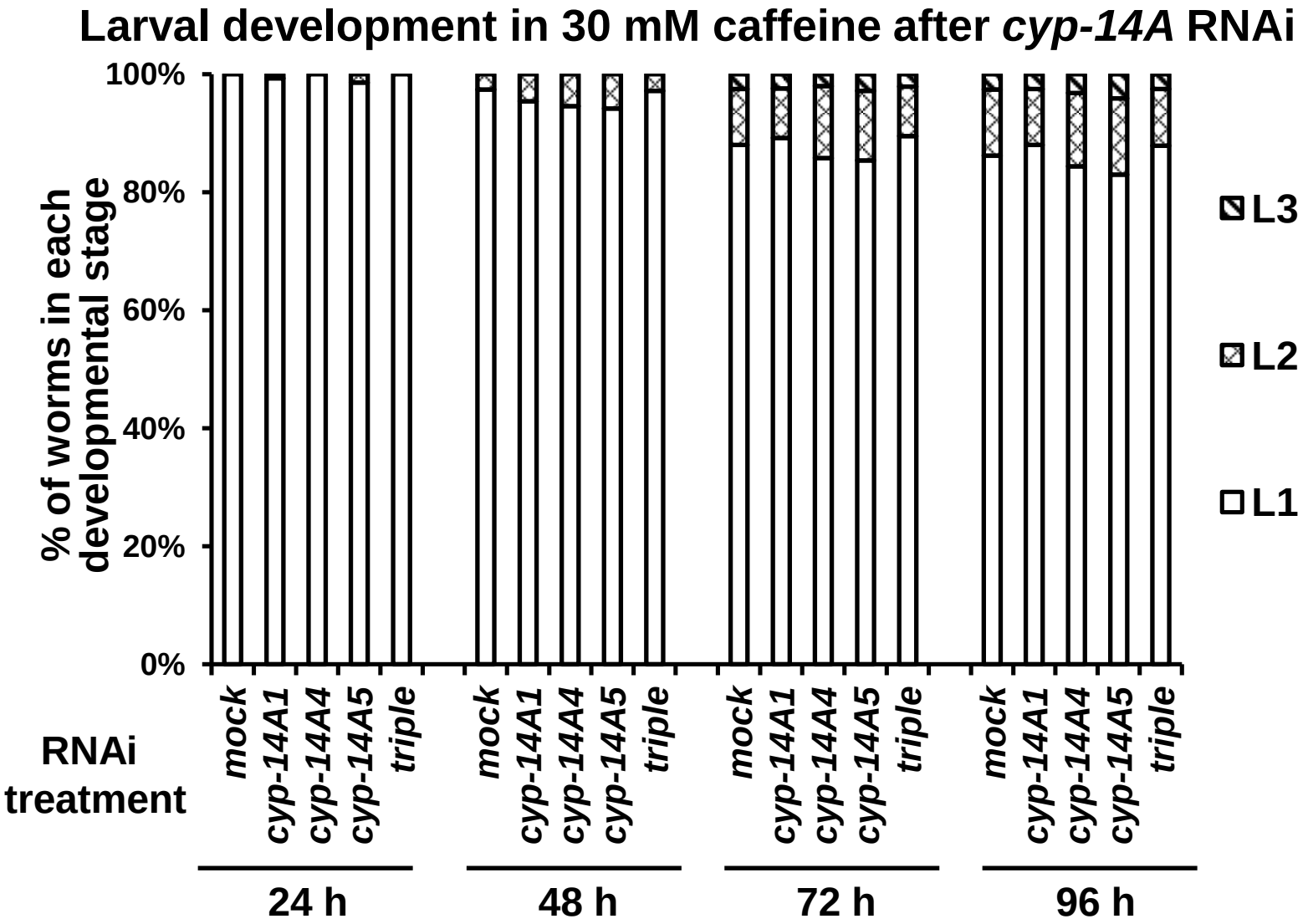
Supplemental Fig. S2. Larval development without caffeine after RNAi of *cyp-35A* family genes. N2 worms synchronized at the L1 larval stage were treated with soaking RNAi (single or quadruple RNAi) to deplete *cyp-35A* family gene activity. Worms were then transferred to normal NGM plates without caffeine, and cultured at 20°C. During the culture, larval development was scored in 24 h intervals for 96 h, and percent distribution of worms at each developmental stage was displayed as a percent distribution graph for each RNAi treatment and time point. About 450 individuals (triplicates of 150 individuals/plate) were scored for each RNAi treatment. Average values of percent distribution of worms at each developmental stage are summarized in Table S3.

Fig. S3



Supplemental Fig. S3. Larval developmental in 10 mM caffeine after RNAi of *cyp-35A* family genes. N2 worms synchronized at the L1 larval stage were treated with soaking RNAi (single or quadruple RNAi) to deplete *cyp-35A* family gene activity. Worms were then transferred to 10 mM caffeine-containing NGM plates and cultured at 20°C. During the culture, larval development was scored in 24 h intervals for 96 h, and percent distribution of worms at each developmental stage was displayed as a percent distribution graph for each RNAi treatment and time point. About 450 individuals (triplicates of 150 individuals/plate) were scored for each RNAi treatment. Average values of percent distribution of worms at each developmental stage are summarized in Table S3.

Fig. S4



Supplemental Fig. S4. Larval developmental in 30 mM caffeine after RNAi of *cyp-14A* family genes. N2 worms synchronized at the L1 larval stage were treated with soaking RNAi (single or triple RNAi) to deplete *cyp-14A* family gene activity. Worms were then transferred to 30 mM caffeine-containing NGM plates and cultured at 20°C. During the culture, larval development was scored in 24 h intervals for 96 h, and percent distribution of worms at each developmental stage was displayed as a percent distribution graph for each RNAi treatment and time point. About 450 individuals (triplicates of 150 individuals/plate) were scored for each RNAi treatment.