Figure S1  The pha-1(ts) mutant shows defects in the arcade–pharynx junction. (A–H) DIC (A,C,E,G) and corresponding fluorescence (B,D,F,H) images of wild-type (A,B) and pha-1(ts) mutant larvae (C–H) expressing the bath-15::GFP arcade cell reporter, which marks the anterior half of the buccal capsule. Anterior is to the left. Arcade (a) and pharyngeal (p) contributions to the buccal capsule (white lines) are indicated. Arrow indicates region of separation or aberrant morphology at the division between the arcade- and pharynx-derived buccal capsule. The bath-15::GFP reporter marks both the cell bodies (posterior and round) and processes (anterior and posterior, variably shaped) of the arcade cells. Note that the anterior portion of the buccal capsule in mutant animals where the capsule has been severed coincides with the location of anterior bath-15 expression, consistent with breakage occurring at the junction of the arcade and epithelial cells. (I,J) pha-1(ts) larva with a severed buccal capsule (I) and abnormal arcade cell morphology (J), as indicated by arrowheads. I and J depict different focal plains of the same larva. Size bar in A represents 10 µm for A–J.