**Figure S3**  Terminal cell defects in *Cdc42* mutants. Tracheal terminal cells homozygous for *Cdc42* have branching defects (A) and no gas-filled lumen (A'). Dashed white lines demark where the homozygous GFP-labeled cell starts relative to other (wild-type) tracheal cells. Additional defects are observed in *Cdc42* mutants, including fine filopodial-like extensions (arrowheads) and regions of branches in which the cell membranes appear to spread out on the substrate, leading to a wider and thinner appearance (arrow). Scale bar; 75μm.