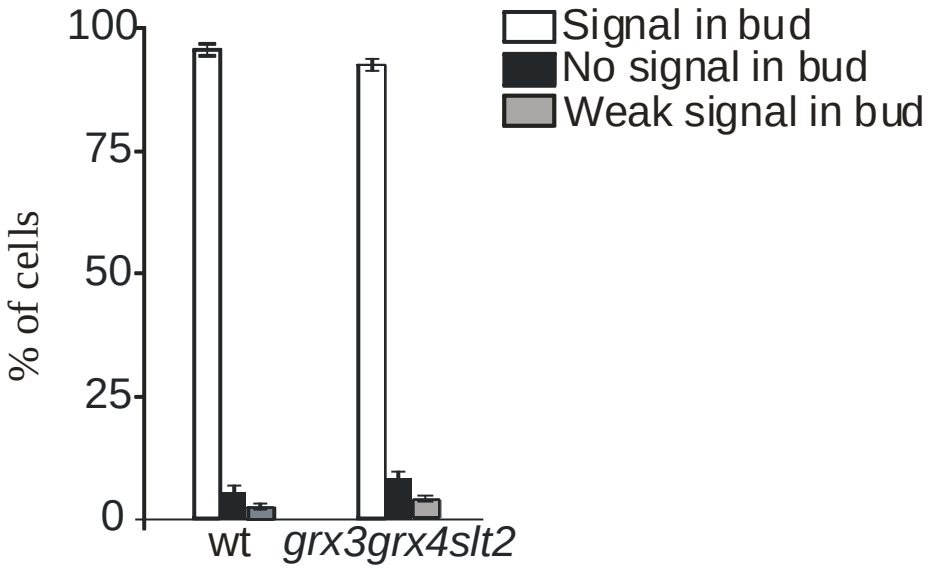

Fig. S1. The mutant *grx3grx4slt2* does not present any evident defect in vacuole heritage. Wt and *grx3grx4slt2* strains were exponentially grown at 25ºC in SD medium. Five ml aliquots were added with alpha factor to a final concentration of 8 mg/ml. Cultures were allowed to grow for 4 hours at 25ºC. Upon this period of time, all the cells were blocked in G1 as shmoos. Subsequently, vacuoles were stained with the dye FM4-64, as described in Material and Methods. Upon the incubation with the dye, cells were immediately washed four times with fresh SD medium. Upon the last wash, pellets were resuspended in fresh SD medium and incubated at 25ºC for 8 hours. Cells were synchronised in G1 and bud emergence was recorded until the next cell division. We screened vacuole segregation to daughter cells in 1.000 cells. This experiment was repeated three times, obtaining equivalent results. Histograms represent the percentage of cells with signal, weak signal or no signal in the bud.