

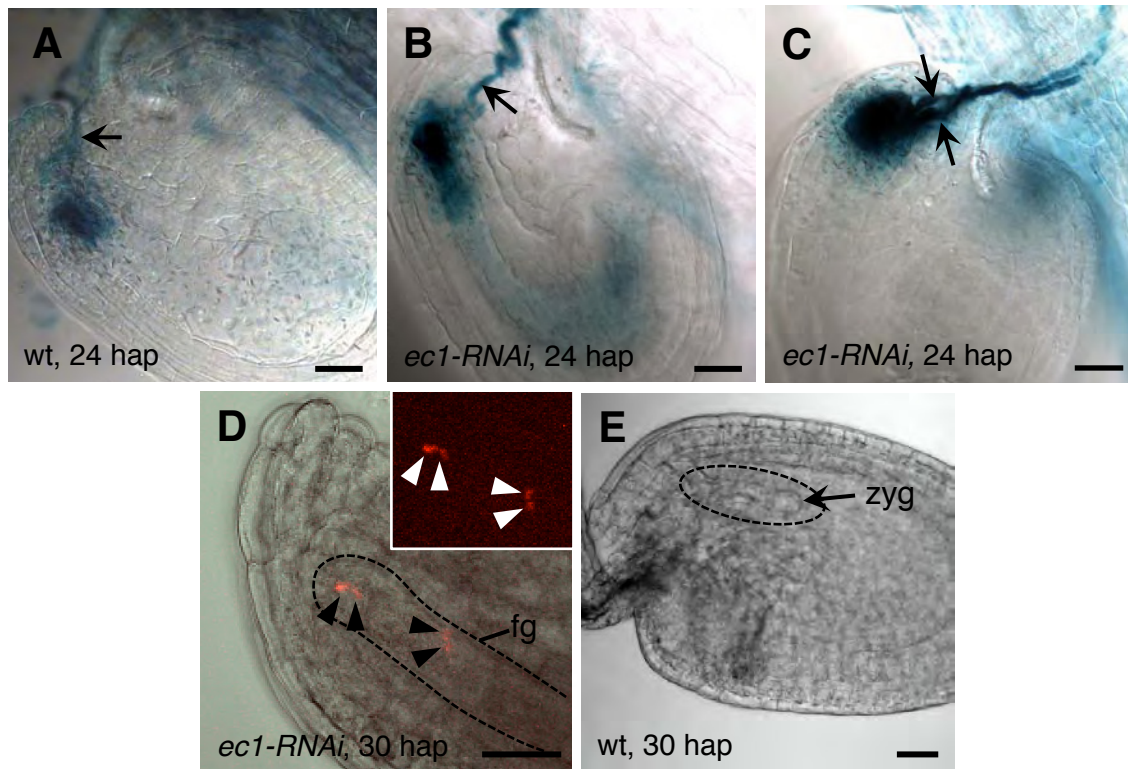


Figure S6.8 | Neither pollen tube attraction nor pollen tube reception is impaired in ovules of heterozygous *ec1-RNAi* lines but multiple pollen tube attraction and sperm cell delivery can be observed.

(A) to (C) Pollen tubes that have entered wild-type (A) and *ec1-RNAi* (B and C) ovules, analyzed by DIC microscopy at 24 hours after pollinating emasculated pistils with *ARO1p:GUS* (Gebert et al., 2008). (A) Like described previously (Beale et al., 2012; Kasahara et al., 2012) one pollen tube (arrow) generally enters one ovule, a phenotype that was observed in 99% of all pollen tube-targeted wild type ovules ($n = 4$ pistils, with 40 to 50 ovules, each). In pollen tube-targeted ovules of line *ec1-RNAi_18* one pollen tube was found to enter one ovule in a frequency of 88.4 % (B), while even two pollen tubes (arrows) were found to enter one embryo sac in a frequency of 11.6 ± 2.6 (SEM; $n = 5$ pistils) (C). (D) Merged bright field and fluorescent CLSM image of an *ec1-RNAi* ovule 30 hours after pollination with the sperm cell marker line *HTR10p:HTR10-mRFP1*. Two sperm cell pairs (arrowheads) are delivered into the female gametophyte (fg). Inset in (D) shows the corresponding fluorescence image. (E) Wild type ovule, 30 hours after pollination with the sperm cell marker. The developing zygote (zyg) is visible. Abbreviations: fg, female gametophyte; hap, hours after hand pollination; wt, wild type; zyg, zygote. Scale bars = 20 μ m.