

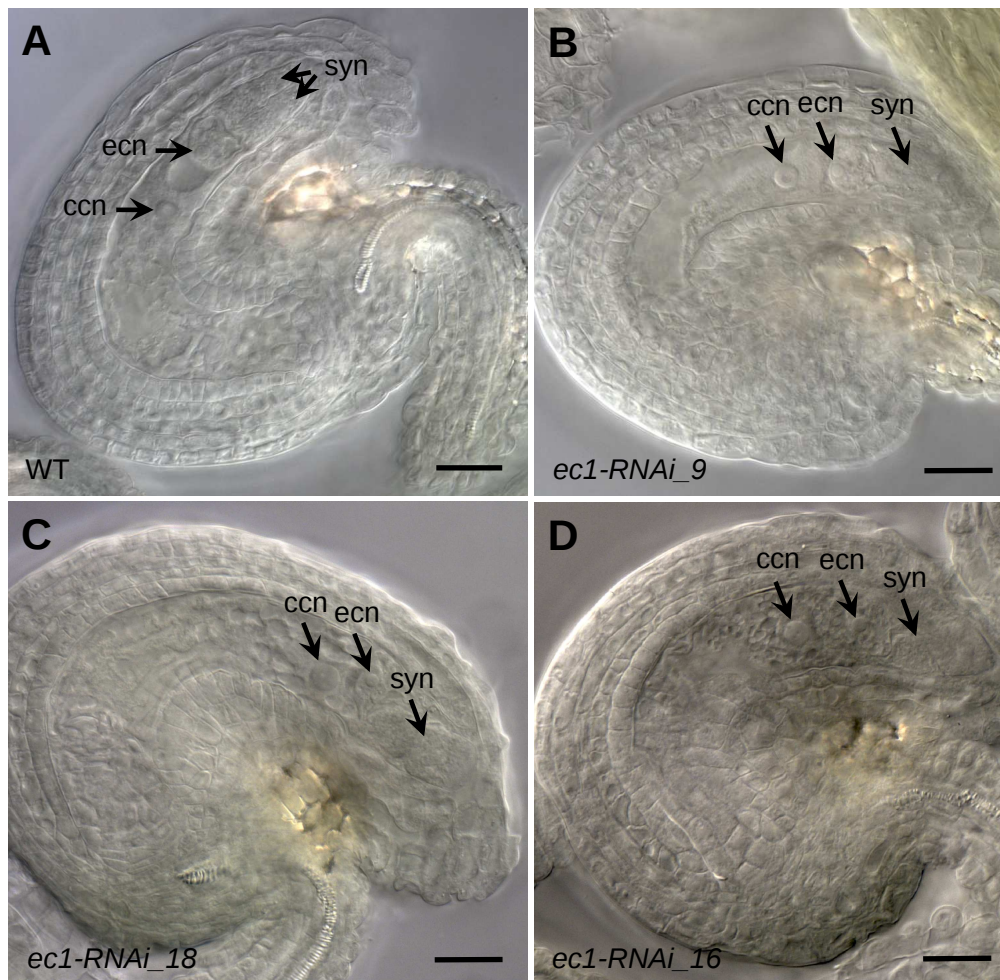


Figure S6.7 | Mutant *ec1-RNAi* ovules show normal female gametophyte development.

(A) Differential interference contrast microscopy (DIC) image of a cleared wild type ovule, and **(B)** to **(D)** ovules of three independent *ec1-RNAi* lines. In total, 26 independent *ec1-RNAi* lines were generated and analyzed for ovule morphology and embryo sac maturation. Flowers at stage 11 (Smyth et al., 1990) were emasculated and the pistils were dissected and cleared 2-3 days later. Arrows point to the different cells or their nuclei, visible within the mature female gametophytes (FG7; stages according to (Christensen et al., 1997)). Of the 26 lines analyzed, 23 showed the typical wild-type FG7 morphology, indicated by the large secondary central cell nucleus (ccn) which results from the fusion of the two polar nuclei during Arabidopsis embryo sac maturation (Portereiko et al., 2006; Kägi et al., 2010). Successful synergid maturation is indicated by their ability to attract pollen tubes (see **Figure S6.8**). Egg cell maturation in *ec1-RNAi* ovules is indicated as egg cell integrity is required for completion of female gametophyte development (Völz et al., 2010). Three out of 26 *ec1-RNAi* lines exhibited FG1 arrest (functional megaspore arrest) and were not not considered for further analysis. Note that the RNAi approach occasionally impacts male (Xing et al., 2007) and female gametophyte development (own observations). Abbreviations: cc, central cell; ccn, central cell nucleus; ec, egg cell; ecn, egg cell nucleus; syn, synergid cell. Scale bars = 20 μ m.