



**S1 Fig. Cytological observation and biochemical analysis of the wild-type and *o10* endosperm.** (A) Scanning electron microscopy of the wild-type and *o10* endosperm. Bars = 20  $\mu$ m. (B) Resin slice observation of the wild-type and *o10* endosperm at 12 DAP and 18 DAP. Bars = 50  $\mu$ m. (C) SDS-PAGE analysis of the total protein extracts from the endosperm of developing wild-type and *o10* kernels (18 DAP and 24 DAP) and mature kernels. (D) Protein quantification of total protein, zein and non-zein extracted from the endosperm of wild-type and *o10* mature kernels. (E) Comparison of the total starch content in the wild-type and *o10* mature kernels. (F) Comparison of the total lipid content in the wild-type and *o10* mature kernels.