

**Supplemental Figure 1.** Expression pattern of TCP5 in Arabidopsis petals during early and later stages of flower development.

(A-C) Confocal microscopy of GFP-tagged TCP5 in the distal part of the petal. The GFP fluorescence can be seen as a green signal in (A), while the autofluorescence of chromo and/or chloroplasts is shown in red (B). The overlay is shown in (C), highlighting the nuclear localization of the GFP signal. (D) shows qRT-PCR analysis of cDNA of wild type petals from stage 12 (flowers close to anthesis), stage 14 (fully opened flowers) and stage 16 (senescing flower). The y-axis shows the relative expression with TIP41 used as housekeeping gene for normalisation. The expression of TCP13 and TCP17 is scaled to the relative expression of TCP5. Asterisks indicate significantly different expression compared to expression at stage 12 using three biological replicates (Student's, t-test p<0.05). The stages and graphic representation thereof are according to Smyth et al. (1990). Scale bars in (A-C) are 7.5  $\mu$ m.