Figure S1 200000 Image J Relative Light Units PIN6::FILUC False colour classification 1000Ó 720 7500 В 700 900 5000 С 2500 680 750 D 0

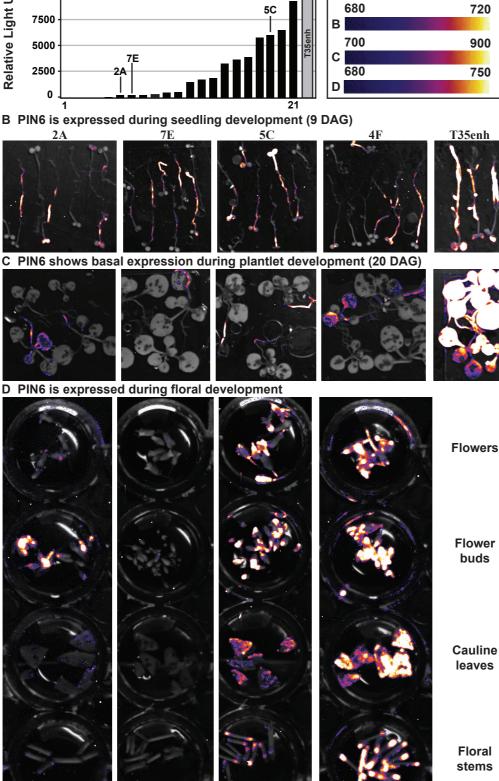


Figure S1. Regulation of PIN6::luciferase expression during development. A) Luciferase activity spectrum for multiple independent PIN6 transgenic lines harbouring pTPIN6::FiLUC promoter:luciferase fusion were analysed for luciferase activity and are presented in the order of increasing activity along the X-axis. Select lines chosen for further analysis of PIN6::FiLUC regulation after germination are displayed. The luciferase activity of mature leaf tissues (at least 2 leaves/plant) from independent transgenic lines (T₀ plants) were measured using the in vivo leafdisk assay (at least 2 leaf discs/leaf). B) to D) Regulation of the PIN6 promoter during seedling development. *In vivo* bioluminescence was assayed in seedlings (B; 9 DAG), plantlets (C; 20 DAG) and flowering tissues (D; 45 DAG) from transgenic lines harbouring PIN6 (pTPIN6::FiLUC) or CaMV35s (pT35enh:FiLUC) promoters. E) False colour images obtained using the Image J software: the threshold was adjusted such that black indicates no luminescence, blue reflects low levels of luminescence and white reflects higher levels of luminescence.