

### Supplemental Methods for Figure S1:

In order to analyze the gene expression of the transformed constructs, plants of the respective lines were grown for 14 days on GM medium. Afterwards around 100mg plant material was harvested and the RNA extracted with the Qiagen RNeasy Plant Mini Kit (Qiagen, Hilden, Germany) following its protocol. Reverse transcription was subsequently done with the Thermo Scientific RevertAid First Strand cDNA Synthesis Kit (Life technologies GmbH, Darmstadt, Germany) using an oligo(dT)<sub>18</sub>-primer and following its protocol. Quantitative RT-PCR was conducted on a Roche LightCycler 480 (Roche Diagnostics, Mannheim, Germany) with the KAPA SYBR FAST qPCR Master Mix (VWR International GmbH, Erlangen, Germany) using the standard protocol for this mix. The sequence for the primers used are: REV3 FW primer 5-CAATGGATATCGAATGACAAAGGAG-3 and REV3 RV primer 5-GATCTATCTCCGACTCTGTATAAGC-3 (spanning the rev3-2 T-DNA insertion). Normalization was done using the two housekeeping genes *ACTIN2* (At3g18780) and At4g34270 using the following primer: *ACTIN2* FW: 5-ATTCAGATGCCCAGAAGTCTTGTTTC-3; *ACTIN2* RV: 5-GCAAGTGCTGTGATTTCTTTGCTCA-3; At4g34270 FW: 5-AGATGAACTGGCTGACAATG-3 ; At4g34270 RV: 5-TGTTGCTTCTCTCCAACAGT-3.