

Additional file 4. Agarose (2%) gel electrophoresis of sqRT-PCR products. **a)** analysis of *Medicago truncatula* plants along development: 24 h post-imbibition (hpi) and the root (R) and the aerial (A) parts of 3-, 6- and 10-d-old dark- and light-grown seedlings; and the roots and the leaves of stages 1, 2 and 3; the flowers of stages 1, 2 and 3; the pods of stages 1, 2 and 3 (as established by Kurdyukov et al. [69] and showed in Supplementary figure 1); and the green seeds. **b)** analysis of *Medicago truncatula* 6-d-old seedlings treated during the last 24 h with indolacetic acid (IAA); benzylaminopurine (CK); gibberellic acid (GA); epibrassinolide (BL); strigolactone GR24 (SL); abscisic acid (ABA); sodium chloride (NaCl); mannitol; ethephon (ET); salicylic acid (SA); methyl jasmonate (MeJA); as well as a mixture of MeJA with either: ET, GA or SA. Temperature treatment was done for 12 h in darkness in cameras at 4, 25 and 37°C, with 25°C as the control temperature. Finally, for N (-N) and Pi (-Pi) starvations, plants were kept for 7 days either in Fahræus without N supplement or Fahræus-N media without phosphate, respectively. Wounding was performed on one foliole by transversally cutting the middle vein. The dotted line inserted between ST3 and UBI results in all gel images indicates that it has been cropped from the original gel and added as a reference.

