



**Fig. S9.** Overexpression of MdARF18 inhibits the growth of apple calli. a. Apple calli were grown for 25 days under different nitrate conditions. b. Fresh weight of apple calli. c. Nitrate content of apple calli. d. NR activity of apple calli. Bars represent the mean  $\pm$  SD (n = 3). Different letters above the bars indicate significant differences using the LSD test ( $p < 0.05$ ).