



**Fig.S2 Overexpression of *MdABF1* negatively regulates nitrate absorption and assimilation genes in *Arabidopsis* and apple calli under ABA treatment.**

(a-h) The physiological indicators of *MdABF1* transgenic *Arabidopsis* under low (0.2 mM) or high (10 mM) nitrate with 0 or 20  $\mu$ M ABA treatment. Determination of primary root length (a-b), fresh weight (c-d), nitrate content (e-f) and NR activity (g-h). (i-n) The physiological indicators of *MdABF1* transgenic apple calli under 0.8 mM and 5mM KNO<sub>3</sub> with 0 or 20  $\mu$ M ABA conditions. Fresh weight (i-j), NR activity (k-l) and nitrate content (m-n). Error bars exhibit the means  $\pm$  SD of three independent replicates. Asterisks indicate significant differences (LSD test, \**P* < 0.05).