



**Figure S1. Analysis of *MeFER4* Expression and Subcellular Localization, and Validation of Transgenic *Arabidopsis*.** A. Expression analysis of *MeFER4* under drought stress in SC124 (left) and three other varieties (right). CK means control, MD means moderate drought, SD means severe drought, RW means re-watering. SC11, 27-4, 50-2, and NZ199 are cultivated varieties of cassava. CK means control, D means drought stress condition. Error bars represent standard deviations, and asterisks indicate significant differences (\* $P < 0.05$ , \*\* $P < 0.01$ ). B. Subcellular localization of *MeFER4*. GFP and mCherry fluorescence images indicate the localization of *MeFER4*-GFP and the chloroplast marker *OsPHT4*-mCherry in leaf cells. The merged images show the co-localization of *MeFER4* with the chloroplast marker. Scale bar = 20 μm. C. PCR identification of *MeFER4* transgenic *Arabidopsis*. The gel electrophoresis image displays the presence of the eGFP band in positive control, OE-6, OE-7, and OE-10 lines, but not in the negative control or NTC (no template control). M represents the molecular marker. D. Western blot analysis of *MeFER4* transgenic *Arabidopsis*. The blot shows the presence of GFP-tagged *MeFER4* protein in OE-6, OE-7, and OE-10 lines, with anti-Actin used as a loading control. WT represents the wild type.