



Figure 9. Heterologous overexpression of *OsMTP1* increases ability of Mg^{2+} and Na^{+} transport in yeast. (a-b) The wild-type yeast strain CM52 and CM62 transformed with empty vector (EV) and OE-*mOsMTP1* were used as positive and negative controls. (a) Representative images of yeast cell growth on solid medium containing 0, 0.1, and 1 mM MgCl_2 . (b) Complementation of yeast cell growth assay in liquid medium containing 0, 0.1, and 1 mM MgCl_2 . Cell density (OD_{600}) of each yeast line was monitored every 2 h over 66 h ($n = 8$ replicates). Value represent means \pm SD. (c-h) Yeast wild-type cells (FM391) harboring EV, OE-*mOsMTP1*, and OE-*OsMTP1* was used to monitor cell growth rates in solid and liquid medium containing 0, 0.5, or 1 M of NaCl and 1M of NaCl with 0.1 or 1 mM MgCl_2 . (c) Representative images of yeast cell growth of WT, EV, OE-*mOsMTP1*, and OE-*OsMTP1* on solid medium. (d-h) Cell growth assay in liquid medium containing 0 mM (d), 500 mM (e), and 1 M (f) NaCl, 1M NaCl with 0.1 mM MgCl_2 (g) and 1 mM MgCl_2 (h). Cell density (OD_{600}) of each yeast line was monitored every 2 h over 48 h ($n = 8$ replicates). Value represent means \pm SD.