



Fig. S4. Control treatment with only water for SOMA-NLS and SOMA-NES. The response of the SOMA-NES-1 and SOMA-NLS-1 transgenic lines to water treatment was evaluated by analyzing cotyledon epidermal pavement cells. Graphs depict the average ratio of YPet to Turquoise GL emission produced by exciting Turquoise GL. The shaded background on each graph indicates when the sample was exposed to a given treatment. During the first ten minutes of each experiment the samples were incubated in pure water. “H2O” indicates when a fresh volume of water was introduced into the imaging chamber. “chitin” indicates 40 mg/ml chitin and “NaCl” indicates 150 mM NaCl were present in the imaging chamber during the shaded time period. Error bars indicate standard deviation. “Ratio (YFP/CFP)” indicates the normalized value of YPet emission divided by Turquoise GL emission.