



Supplementary Fig. S1 HPLC-PAD chromatogram testing alkaline α -galactosidase (α -Gal) activity in crude extracts from *E. coli* transformed with *RS5::pPROExHTc*.

Crude extracts were incubated with 50 mM Raf at pH 7.5 for 1 h. Crude extracts (from *Sf9* insect cells) that heterologously expressed *AT5IP2* (At3g57520, Peters et al. 2010) were used as a positive control for α -Gal activity. Neither the empty vector control, pPROExHTc, nor *RS5::pPROExHTc* showed any α -Gal activity. Raf, raffinose (8.2 min); Suc, sucrose (9.4 min); Gal, galactose (12.6 min).