

Supplemental Figure 1. Evaluation of the AtAGP21- and AtAGP21 mod 5'-UTRs. (A) Schematic representation of the examined constructs. Fluc was fused with each 5'-UTR (B) Protoplasts prepared from various plant species were transfected with plasmids using the PEG-mediated transient expression method as described in our previous paper (Matsui et al., 2009). The means and SDs of three independent experiments are shown. Starting materials for protoplast isolation were as follows: petals of torenia (*T. fournieri*), tobacco (*N. tabacum*) cultured cells, leaves of lettuce (*L. sativa*), shoots of rye (*S. cereale*) and corn (*Z. mays*). Significance tests were performed, and the values highlighted with the same letter are not significantly different at a probability of 0.05.



Supplemental Figure 2. HSPT is superior to NOST in production of HRP in tobacco cultured cells. (A) Schematic representation of expression cassette for horseradish peroxidase (HRP). SP, signal peptide for secretion of HRP; NOS pro. *A. tumefaciens nopaline synthase (nos)* gene promoter; NOST, transcriptional terminator derived from *A. tumefaciens nos* gene; HSPT, transcriptional terminator derived from *A. tumefaciens nos* gene; HSPT, transcriptional terminator derived from *A. tumefaciens nos* gene; RSP, transcriptional terminator derived from *A. tumefaciens* gene; RB, right border; LB, left border. Either NOST or HSPT was fused to HRP. (B) Tobacco cultured cells (*N. tabacum* L. cv BY2) was transformed by *A. tumefaciens* method. We measured the HRP activity of randomly selected kanamycin-resistant cali.