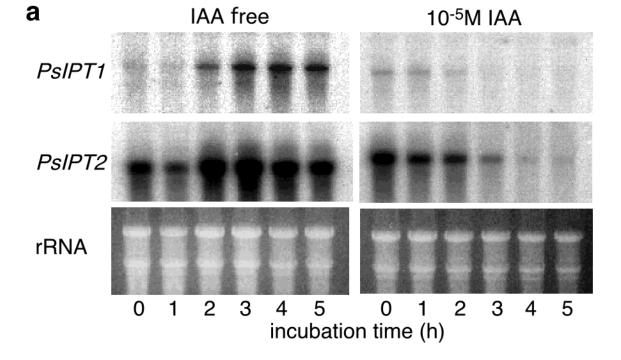


Figure 1. Accumulation patterns of *PsIPT* transcripts in the nodal stem after decapitation. The second nodal stems, from which the axillary buds were removed, after decapitation 1 cm above the second node, were collected at the indicated times. RNA was isolated from these stems and subjected to Northern blot analysis. Numbers below each lane indicate the time in hours after decapitation. The bottom panel (rRNA) shows the ethidium bromide-staining RNA gel as the loading control. Results are representative of four separate experiments.



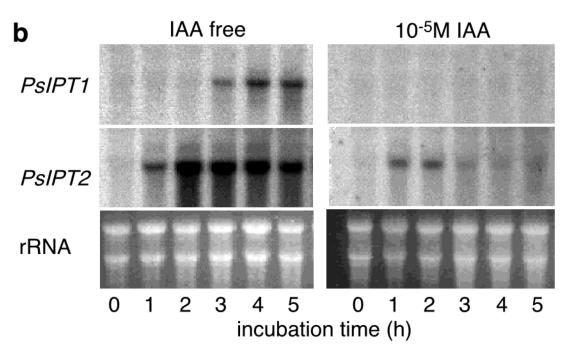


Figure 2. Effects of exogenous IAA on *PsIPT* expression in the nodal excised stem segments. The nodal stem segments, from which the axillary buds were removed, were excised from seedlings 3 h after decapitation 1 cm above the second node (a) and excised from intact seedlings (b). The excised stem segments were incubated with 10⁻⁵ M IAA or IAA-free buffer. Numbers below each lane indicate the incubation time. The bottom panel (rRNA) shows the ethidium bromide-staining RNA gel as the loading control. Results are representative of four separate experiments.

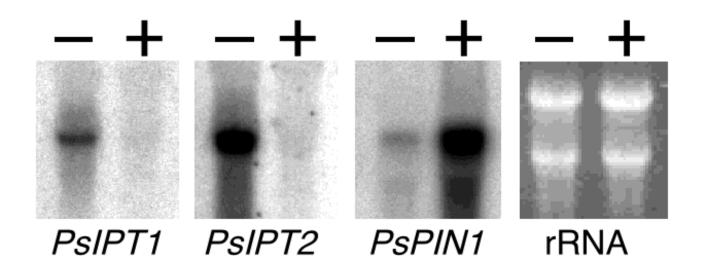
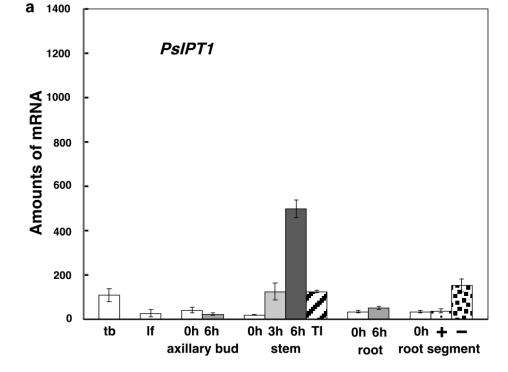


Figure 3. Effects of IAA applied to the decapitated stump on *PsIPT* expression. The shoot apex was removed 1 cm above the second node, and lanolin paste with 1% IAA (+) and without (-) was immediately applied to the cut stump. The *PsIPT1*, *PsIPT2*, and PsPIN1 transcript levels were determined in a 1-cm long piece of stump 3 h after application. The right-hand panel (rRNA) shows the ethidium bromide-staining RNA gel as the loading control. Results are representative of three separate experiments.



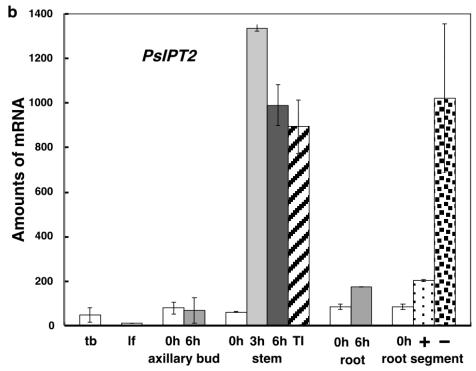


Figure 4. Expression patterns of *PsIPT* transcripts in various organs before and after TIBA and IAA treatments. Accumulation patterns of *PsIPT1* (a) and *PsIPT2* (b) transcripts in various organs before and after TIBA and IAA Total RNAs were prepared from several treatments. organs: terminal buds (tb) and leaflets (If) in intact seedlings; axillary buds 0 h, 3 h and 6 h after decapitation; root 0 h and 6 h after decapitation. Total RNAs were also prepared from stems (TI) that were treated with TIBA for 6 h, and root segments that were incubated with 10-5 M IAA (+) or IAA-free (-) buffer for 6 h. The total RNAs were subjected to quantitative real-time PCR. Further details of the conditions are described in Experimental procedures. Accumulation levels of the transcripts are given as the copy number of mRNA per 1 ng total RNA. Real-time PCR was performed in triplicate, and the mean values with standard deviation are shown.

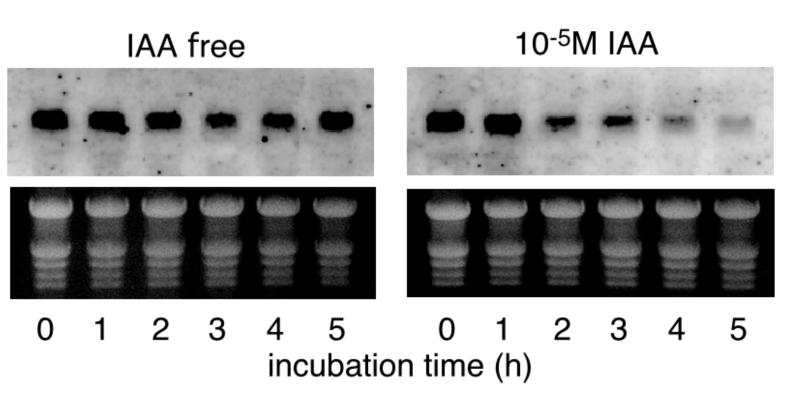


Figure 5. Effects of IAA on GUS expression under the control of the PsIPT2 promoter region in transgenic *Arabidopsis* seedlings. Whole 10-d old transgenic *Arabidopsis* seedlings were incubated with 10⁻⁵ M IAA or IAA-free buffer. After incubation, RNA was isolated from the seedlings and analyzed by Northern blotting with GUS DNA as a probe. Numbers below each lane indicate the incubation time.The bottom panels show the ethidium bromide-staining RNA gel as the loading control. Results are representative of three separate experiments.