Supplemental Data

Figure legends

Figure S1. Expression of the *FIN219/JAR1* null mutant in Arabidopsis.
A, Gene structure of a *FIN219/JAR1* null mutant SALK_059774. T-DNA was inserted in the second exon, right after #41 amino acid residue. Grey solid boxes represent exons, and the single line between exons is the intron.
B, Expression of the *FIN219* gene in the null mutant SALK_059774 (*fin219T*). RNA gel blot analysis (upper panel) involved use of the wild type (Col) and the null mutant seedlings (*fin219T*) grown for 4 days in continuous far-red light. Ten microgram of total RNA was loaded onto each lane of the gel. After electrophoresis, the gel was transferred to a nylon membrane, which was then probed with a dig-labeled *FIN219* cDNA. rRNA was used for loading control. (Bottom panel), Protein gel blot analysis was performed to investigate FIN219 protein levels in the null mutant *fin219T*. Total protein extracts were isolated from the seedlings described in above and 100 μg total proteins were loaded onto each lane and probed with FIN219 polyclonal antibodies raised against the N-terminal 300 amino acids of FIN219. RPN8, a subunit of regulatory complex of 26S proteosome, was used as a loading control. The asterisk " * " indicates a cross-hybridized band. The arrow indicates a FIN219 band that is not detected in the null mutant *fin219T*.

Figure S2. Histochemical GUS staining of *FIN219* promoter activities under white light condition.
A, six-day-old seedlings. B, Close-up view of (A). C, Eighteen-day-old transgenic leaves. D, Eighteen-day-old transgenic young leaves. E, Adult

stage of floral organs. F, Close-up view of (E) showing GUS staining of the carpel. G, Stamen. The arrow indicates the vascular bundle of the anther. H, a part of a silique showing GUS staining of the funiculus.

Figure S3. Size determination of FIP1 in FIP1-overexpressed transgenic seedlings grown in far-red light.

Total proteins isolated from FIP1-overexpressed transgenic seedlings grown in far-red light for 4 days were subjected to a 10 % native polyacrylamide gel electrophoresis and then underwent protein blot analysis with c-myc antibodies. M: protein size marker, lane1: c-myc-FIP1 fusion transgenic seedlings, lane 2: fin219 null mutant, lane 3: wild-type Columbia Arabidopsis. Two arrows point to 2 protein bands detected in the sample of c-myc-FIP1 fusion transgenic seedlings.