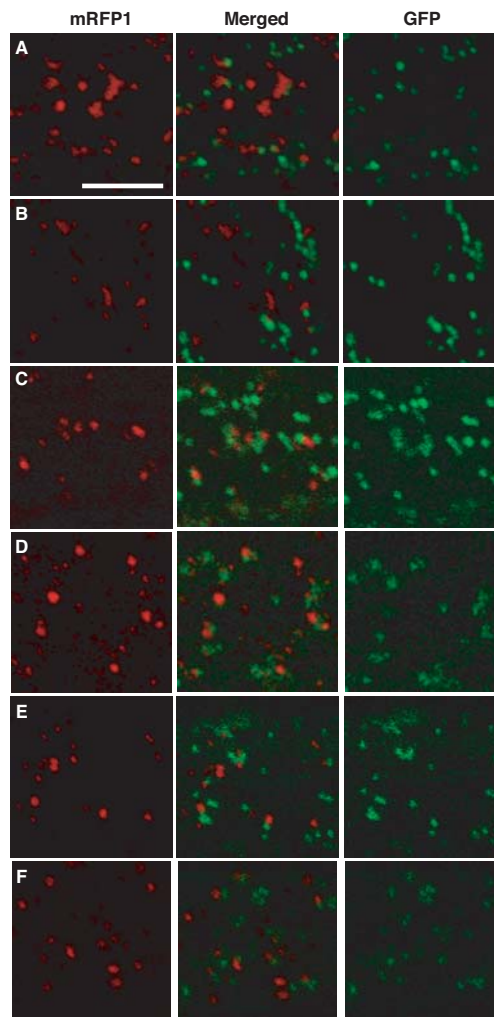
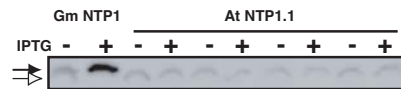


Supplemental Data. Arai et al. (2008) Proteomic Identification and Characterization of a Novel Peroxisomal Adenine Nucleotide Transporter Supplying ATP for Fatty Acid  $\beta$ -Oxidation in Soybean and Arabidopsis.



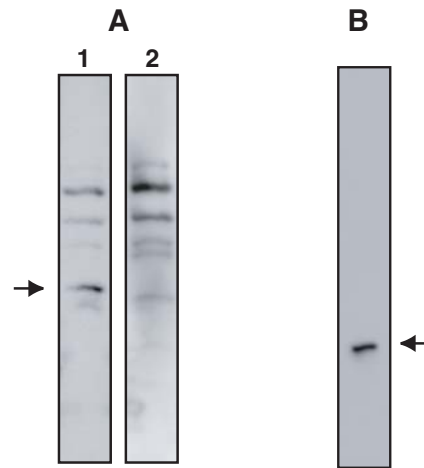
**Supplemental Figure 1. Gm PNC1, At PNC1, and At PNC2 are not co-localized with mitochondria.**

The polypeptides encoding Gm PNC1, At PNC1, and At PNC2 were fused at the amino terminus or carboxyl terminus of mRFP1 under the control of the CaMV 35S promoter. Mt-GFP was used as a marker of mitochondria; Mt (mitochondrial targeting signal) is 42 amino acids long and is derived from the amino terminus of the Arabidopsis F1-ATPase  $\gamma$  subunit. Onion epidermal cells were used for the transient expression of combinations of mRFP1-Gm PNC1 (A), Gm PNC1-mRFP1 (B), mRFP1-At PNC1 (C), At PNC1-mRFP1 (D), mRFP1-At PNC2 (E), and At PNC2-mRFP1 (F). Confocal laser microscopic observation of the transiently-expressed fluorescent proteins (RFP, red color; GFP, green color) was performed in epidermal cells. Center panels showed merged images. Scale bar = 10  $\mu$ m.



**Supplemental Figure 2. At PNC1 was not expressed in *E. coli* cells.**

Expression of His-tagged Gm PNC1 and At PNC1 following IPTG induction in *E. coli* cells. At PNC1 samples were obtained from four individual transformants of *E. coli*. For each sample, total protein prepared from *E. coli* cells was subjected to SDS-PAGE. Recombinant proteins were detected by immunoblotting using anti-His-tag antibodies. Black arrow, the recombinant protein. White arrow, non-specific band.



**Supplemental Figure 3. Specificity of antibodies against Gm PNC1 and pAPX.**

(A) An immunoblot analysis of soybean crude homogenate prepared from etiolated cotyledons using the Gm PNC1 antibodies detected a band with a molecular mass of 35-kD (Black arrow), in addition to some non-specific bands with different molecular masses (lane 1). The recombinant Gm PNC1 immunodepleted the Gm PNC1 antibodies, showing that the antibodies cross-reacted with the antigen (lane 2). (B) An immunoblot analysis of soybean crude homogenate prepared from etiolated cotyledons using the pAPX antibodies detected one single band with a molecular mass of 30-kD (Black arrow), showing that the antibody was mono-specific for pAPX.