



Supplemental Figure 4:

Subcellular localization of GFP:IAA20. *Arabidopsis* seedling roots constitutively expressing smGFP alone (A-D) or sGFP:IAA20 in two different transgenic lines (E-H and I,J) were stained with DAPI and visualized by fluorescence microscopy. B, D, F, and, H show enlarged portions of A, C, E, and G respectively.

#### Microscopy

3-6-day-old light-grown transgenic *Arabidopsis* seedlings were treated with 0.1 µg/mL 4',6-diamidino-2-phenylindole (DAPI) (Sigma, St. Louis, MO) in PBS to stain nuclear material and examined using a Zeiss Axioskop2 plus fluorescent microscope. Images were captured with an AxioCam HRc camera run by the AxioV40 v 4.4.0.0 software package and the following filter sets were used: Fs01 for DAPI (Ex.BP 365/12, Em.LP 397) and Fs10 for GFP (Ex.BP 450-490, Em.LP 515-565) (Zeiss, MicroImaging, Inc., Thornwood, NY).

#### Molecular Techniques

AttB sites and an N-terminal TEV protease cleavage site were added to the IAA20 coding region (ABRC) through PCR amplification. The PCR product was recombined into the pGWB6 binary vector (gift of T. Nakagawa) to introduce an sGFP coding region upstream of IAA20 under the control of the 35S promoter. The coding region for smGFP (gift of C. Dieckmann) was PCR amplified, and modified through site-directed mutagenesis to remove an internal NcoI site and to add NcoI and BamHI sites for cloning. This fragment was then used to replace LUC in the *Pro<sub>UBQ10</sub>:LUC:nos* cassette in pGreen1 0029 with an altered multiple cloning site. *Arabidopsis* transformation and plant propagation were performed as previously described.