



Title	Light-dependent gravitropism and negative phototropism of inflorescence stems in a dominant Aux/IAA mutant of <i>Arabidopsis thaliana</i> , axr2
Author(s)	Sato, Atsuko; Sasaki, Shu; Matsuzaki, Jun; Yamamoto, Kotaro T.
Citation	Journal of Plant Research, 127(5), 627-639 <a href="https://doi.org/10.1007/s10265-014-0643-1">https://doi.org/10.1007/s10265-014-0643-1</a>
Issue Date	2014-09-01
Doc URL	<a href="http://hdl.handle.net/2115/59753">http://hdl.handle.net/2115/59753</a>
Rights	The final publication is available at <a href="http://link.springer.com">link.springer.com</a>
Type	article (author version)
Additional Information	There are other files related to this item in HUSCAP. Check the above URL.
File Information	JPR_127_p627-Suppl.pdf



[Instructions for use](#)

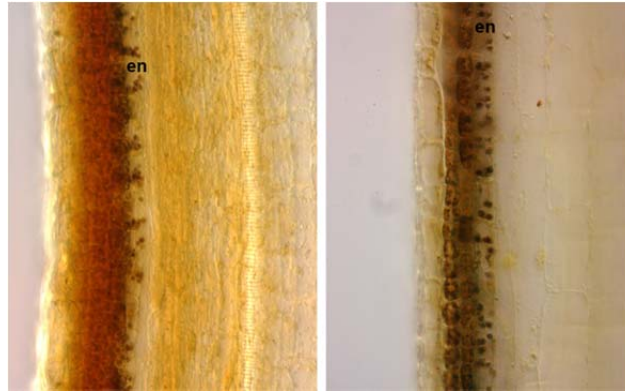


Fig. S1 Longitudinal sections of the primary stem of the wild type and *axr2-1* stained for amyloplasts. The wild type (*left*) and *axr2-1* (*right*) stem segments about 1 cm long were fixed with 3% paraformaldehyde in phosphate-buffered saline overnight, and embedded in 3% agarose. About 60- $\mu$ m-thick longitudinal sections were prepared with a vibrating blade microtome (VT1200S, Leica), and stained with 5% I<sub>2</sub>-KI solution for a few min. en, endodermis

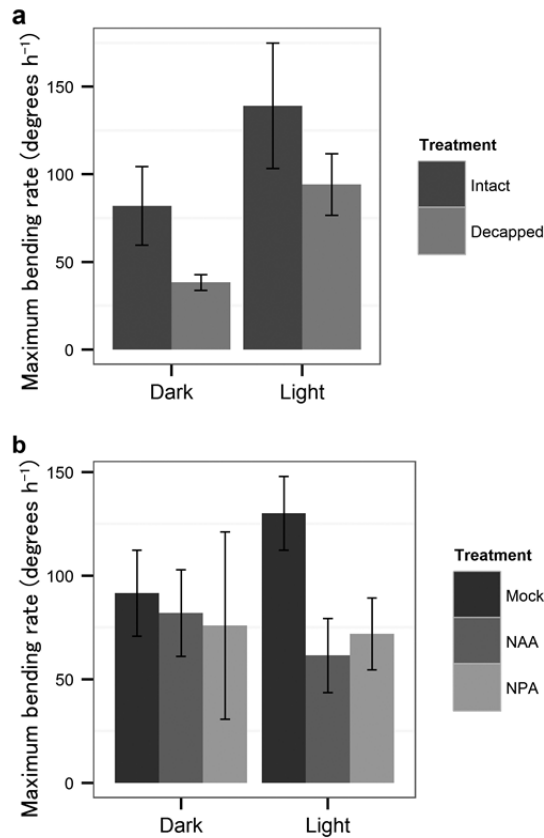


Fig. S2 Effects of decapitation or application of NAA or NPA on the maximum bending rate of gravitropism in wild-type inflorescence stems in the dark or under

light conditions. Plants were placed in a horizontal position ~5 h after decapitation (*upper panel*) or after application of lanolin paste containing 0.5 mM NAA or NPA to apical 1-cm-long portions of stem (*lower panel*), and the time course of the gravitropic response determined for 18 h thereafter in the dark or under light conditions. Each of the data represents mean and SD of three to 14 measurements

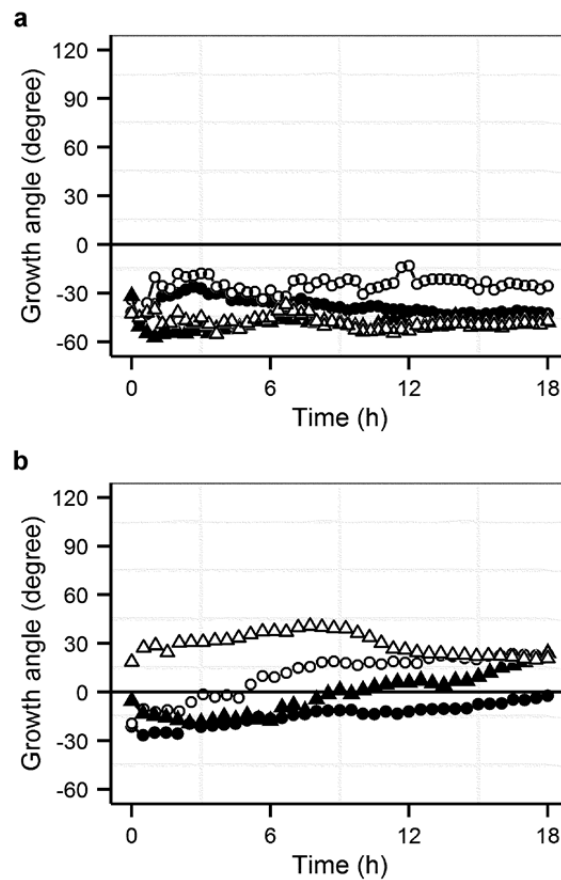


Fig. S3 Time-course of the gravitropic response of *eal1* and *sgr2* (SALK\_098981) inflorescence stems under different light conditions. *eal1* (*upper panel*) or *sgr2* (*lower panel*) were placed in the dark (*closed symbols*) and white-light conditions (*open symbols*) after changing the position of plants by ~90°. Two independent measurements are shown for each genotype (*circles* and *triangles*)

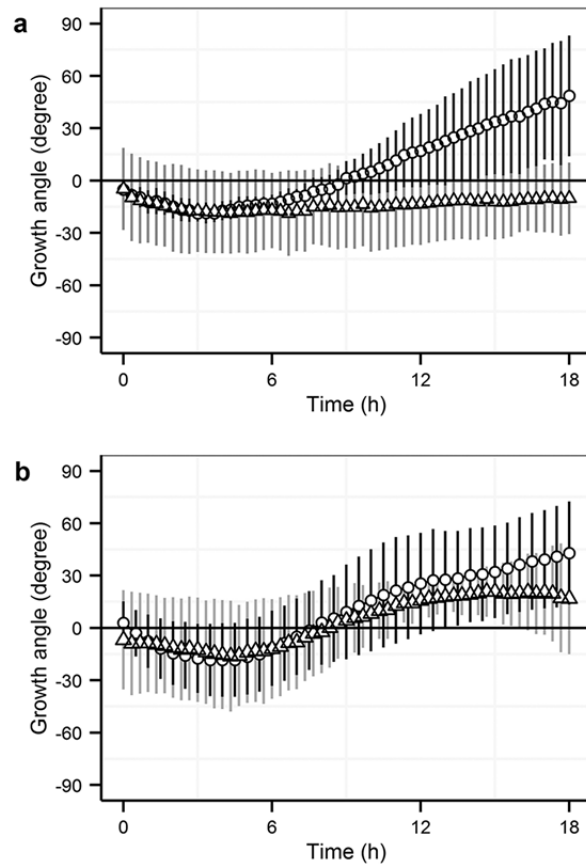


Fig. S4 Effects of application of NAA or decapitation on gravitropism of inflorescence stems of *axr2-1* in white-light conditions. **a** Gravitropic response was determined with 0.5 mM NAA (*triangles*) or mock treatment (*circles*). **b** Gravitropic response was determined after decapitation and removal of all the lateral organs (*triangles*). *Circles* show response of intact inflorescences. Each point represents mean and SD of three to 14 measurements. For more details, see the legend to Fig. 3

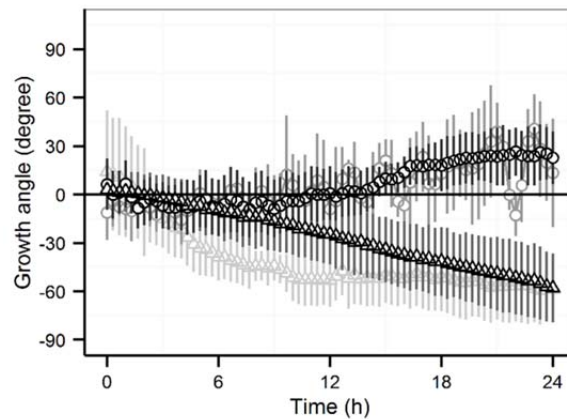


Fig. S5 Effects of application of NPA on phototropism of inflorescence stems of the wild type and *axr2-1*. Lanolin paste containing 0.5 mM NPA was applied to wild-type (circles) or *axr2-1* (triangles) stems. Data of mock treatment are shown with *grey symbols*, which are the same as those in Fig. 3a. Each point represents mean and SD of seven measurements. For more details, see a legend to Fig. 3

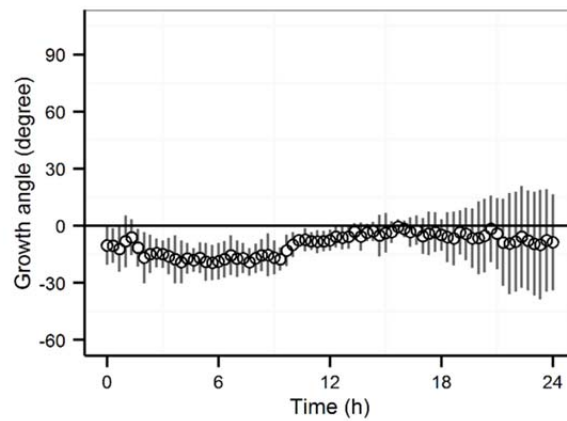


Fig. S6 Phototropic responses of inflorescence stems of *pin1-1* induced by unilateral irradiation with blue light ( $57 \mu\text{mol m}^{-2} \text{s}^{-1}$ ). Each point represents mean and SD of four measurements