

Table S1. Quantification of FRAP analysis of AUX1-YFP fluorescence at the concave and convex sides of the hook

Control			10 μ M ACC		
Concave	Convex	Concave/convex	Concave	Convex	Concave/convex
25.42	14.96	1.70	22.33	3.63	6.16
11.21	14.37	0.78	14.42	11.34	1.27
17.25	24.75	0.70	32.08	23.99	1.34
26.12	27.66	0.94	44.09	20.53	2.15
17.41	33.49	0.52	30.25	12.61	2.40
38.86	36.01	1.08	20.91	19.05	1.10
9.78	22.48	0.43	29.18	8.20	3.56
			31.18	24.07	1.30
			30.84	18.44	1.67
			21.48	28.29	0.76
			28.87	18.77	1.54
			24.06	17.32	1.39
Number of hooks with faster fluorescence recovery at concave side (%)			Number of hooks with faster fluorescence recovery at convex side (%)		
Control	28.6		71.4		
10 μ M ACC	91.6		8.4		

Relative fluorescence values after 10 minutes of FRAP subtracted from the fluorescence directly after bleaching (percentage of the initial fluorescence) in control and ACC-treated seedlings. These values reflect the rate of fluorescence recovery (i.e. how much of the fluorescence recovers). Ratios of these values between the concave and convex sides (reflecting the difference in fluorescence recovery rates) were calculated for each individual seedling. On average, the fluorescence recovery of AUX1-YFP fluorescence after exposure to ACC was twice as fast on the concave side of the hook (ratio 2.05) in comparison with the control (ratio 0.88). The test of equality of variances indicated that the variance of control and ACC-treated seedlings were significantly different ($F=12.24$, $P=0.003$). Therefore, a two-sample t -test that does not assume equal variances was performed. The mean ratio for ACC-treated seedling ($M=2.05$; $s.d.=1.43$; $n=12$) was significantly higher than the mean ratio of control plants ($M=0.88$; $s.d.=0.39$; $n=7$) using the two-sample t -test for unequal variances [$t(14)=2.56$, $P\leq 0.005$].