

Table EV1

	Microtubules orientation (0-90 degrees)				
		Transition zone		Elongation zone	
		0 min	60 min	0 min	60 min
Mock (DMSO)	WT	83.42 ± 1.1	82.99 ± 1.3 ^a	84.46 ± 0.9	82.68 ± 1.1 ^a
	<i>cre1-12</i>	79.83 ± 1.4	84.85 ± 1.4 ^a	84.61 ± 1.3	81.77 ± 1.6 ^a
	<i>ahk2-2</i>	74.56 ± 6.1	77.78 ± 3.0 ^a	78.76 ± 2.4	80.72 ± 1.8 ^a
	<i>ahk3-3</i>	79.68 ± 2.3	81.25 ± 1.3 ^a	84.65 ± 1.2	81.90 ± 1.5 ^a
CK (BAP 10 µM)	WT	81.03 ± 1.3	64.08 ± 4.6 ^{a/**}	82.78 ± 0.9	56.93 ± 5.4 ^{a/****}
	<i>cre1-12</i>	82.57 ± 1.8	77.80 ± 2.3 ^b	82.87 ± 1.5	82.15 ± 1.8 ^{bc}
	<i>ahk2-2</i>	83.59 ± 1.4	78.58 ± 1.6 ^{b/*}	80.90 ± 2.7	71.73 ± 6.2 ^{ac/*}
	<i>ahk3-3</i>	81.19 ± 1.4	62.56 ± 3.7 ^{a/****}	82.01 ± 1.7	62.15 ± 4.7 ^{a/****}
Auxin (NAA 0.1 µM)	WT	80.39 ± 2.2	61.71 ± 7.8 ^{a/*}	80.25 ± 1.6	7.50 ± 1.8 ^{a/****}
	<i>cre1-12</i>	77.52 ± 3.1	70.28 ± 3.01 ^a	82.54 ± 1.0	42.79 ± 5.8 ^{bc/****}
	<i>ahk2-2</i>	80.15 ± 2.1	63.79 ± 7.8 ^{a/*}	81.96 ± 2.0	20.32 ± 5.3 ^{a/****}
	<i>ahk3-3</i>	83.28 ± 2.0	63.45 ± 3.8 ^{a/****}	85.32 ± 1.0	31.72 ± 8.2 ^{ac/****}
CK/Auxin (Pre-treatment BAP 10 µM 1h - NAA 0.1 µM + BAP 10 µM)	WT	71.65 ± 2.5	69.06 ± 7.1 ^{ab}	74.73 ± 2.9	67.85 ± 5.2 ^a
	<i>cre1-12</i>	73.56 ± 4.7	77.42 ± 1.9 ^a	71.20 ± 4.0	34.22 ± 5.2 ^{b/****}
	<i>ahk2-2</i>	68.87 ± 4.5	47.92 ± 6.8 ^b	55.52 ± 6.6	32.53 ± 5.7 ^{b/*}
	<i>ahk3-3</i>	75.49 ± 2.3	70.30 ± 6.2 ^{ab}	42.96 ± 7.3	21.21 ± 6.4 ^{b/*}

Referred to time 0 (time 60min vs time 0 min)

Referred to same condition (mock, CK, Auxin or CK/Auxin) and same zone (TZ or EZ)

Anova $P < 0.05$

Table EV1 | CMT orientation in root epidermal cells of the wild type and the cytokinin receptor mutants. Average angle of the CMT orientations was measured in the wild type (WT) and the *cre1-12*, *ahk2-2* and *ahk3-3* mutants 0 and 60 min after the respective treatments as indicated. Mean ± s.d.. Statistical significance evaluated by Student's *t*-test (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ or **** $P < 0.0001$; referred to time 0) and two-way ANOVA (a-c = $P < 0.05$; same growth zone of wild-type, *cre1-12*, *ahk2-2*, *ahk3-3* mutants in same treatment conditions compared). n = more than 10 cells per growth zone in more than 5 roots per conditions in 3 independent replicates.