

Erratum

Ectopic B-Type Cyclin Expression Induces Mitotic Cycles in Endoreduplicating *Arabidopsis* Trichomes

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In volume 12, issue 5 of *Current Biology* (pp. 415–420), we reported that ectopic expression of a B-type cyclin induced cell divisions in endoreplicating cells. In this study we reported also that only one B-type cyclin, namely CYCLIN B1;2 (CYCB1;2), and not another member of the same family (CYCLIN B1;1 (CYCB1;1)) was able to induce cell divisions. After further investigation on the difference between these two cyclins, we determined that the CYCB1;2 clone we expressed in plants was mutated. Two base-pair exchanges eliminated the start codon and resulted in a N-terminally truncated protein (the first 133 amino acids were truncated). Expression of the full-length CYCB1;2 cDNA did not induce cell divisions. However, by ectopic expression of the predicted N-terminally truncated CYCB1;2 protein version (amino acids 134–445), we could reproduce the phenotype. Thus, B-type cyclin activity can induce ectopic cell divisions in endoreplicating cells. Yet, at the moment we cannot exclude that a similar truncation of CYCB1;1 could result in a similar phenotype, and the conclusion that CYCB1;1 and CYCB1;2 are distinct can at the current state of analysis not be maintained. In addition, we have to conclude from these new results that the induction of cell divisions in endoreplicating cells is controlled not only by the expression of B-type cyclins but also by a regulatory mechanism impinging on the N terminus of CYCB1;2, and from studies in animals it is well-known that B-type cyclins can be stabilized if the N-terminus is deleted. All further observations and conclusions in the paper are not affected by this revision.