

Supplementary information

Dynamics of plant DNA replication based on PCNA visualization

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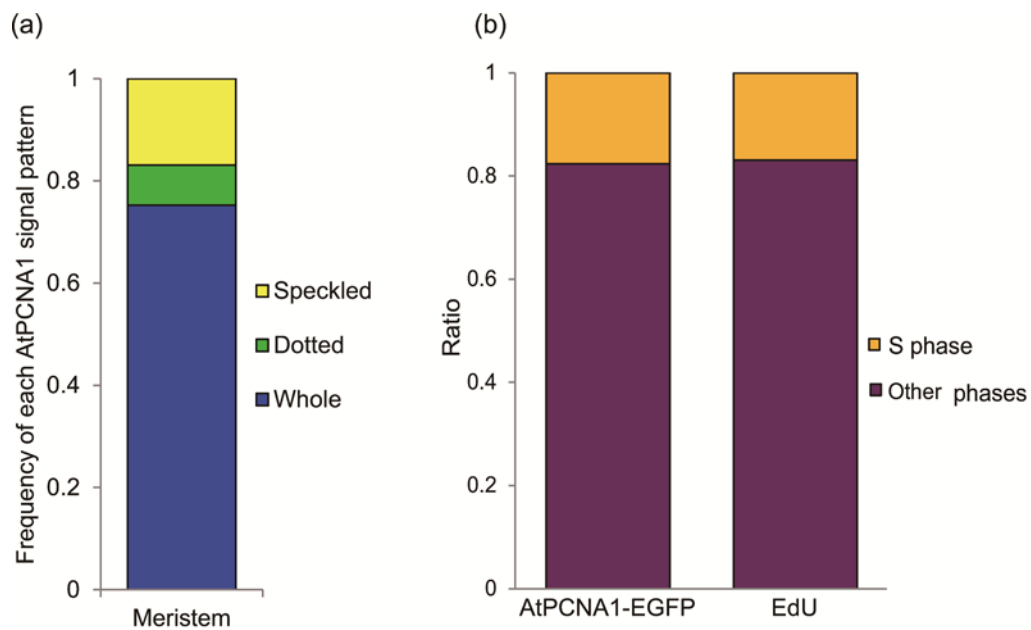
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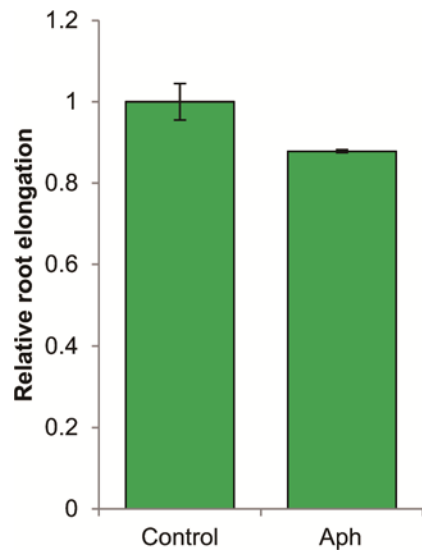
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Supplementary Figure S1.

(a) Meristematic epidermal cells were used in AtPCNA1-EdU co-localization analyses ($n = 307$ nuclei from three plants).

(b) Confirmation of the AtPCNA1-EGFP line as a useful marker line for visualization of S-phase progression. The ratio of the number of nuclei showing AtPCNA1 dotted and speckled patterns to total nuclei was calculated and compared with a previous report using EdU incorporation⁶.



Supplementary Figure S2.

Relative root elongation of pAtPCNA1::AtPCNA1-EGFP on the control medium and medium supplemented with 12 $\mu\text{g}/\text{mL}$ aphidicolin. Root length was measured 24 h after transfer to each medium.

Supplementary Table S1. Classification of the pattern of AtPCNA1 and EdU signals in Fig 4.

Type	AtPCNA1 signals	EdU signals
I	whole	whole
II	whole	speckled
III	whole	negative
IV	dotted	whole
V	speckled	whole
VI	speckled	mixed
VII	speckled	speckled

Supplementary Table S2. PCR primers used in this study.

No.	Name	Purpose	Sequence	Tm(°C)
1	AtPCNA1_forward_pENTR_PCR	Cloning	CACCGGGCAAAGTCGGTTTTGGA	64
2	AtPCNA1_reverse_pENTR_PCR	Cloning	GGGATTAGTGTCTTCTTCTTCTTCA	56
3	AtPCNA1 sequence1	Sequencing	GGGCTCGTTGTTGAAGAAGGTTCTA	61
4	AtPCNA1 sequence2	Sequencing	GTAAAACGACGGCCAG	51
5	AtPCNA1 sequence3	Sequencing	GGAAACAGCTATGACCATG	51