

Table S1. Primers used in this study

Primer	Sequence (5' to 3')
TW1165	ATATGGTACCAATAAAAAATAAATCAC
TW1166	TGCTTGTCGACTGTATACTAA
TW1169	ATATGGTACCACTTCATGTTCTTCCCTT
TW1170	ATATGTCGACAAGCCAATACATATCCA
RT67	ATATGTCGACAGAAACTCACTCACTATTACATC
RT68	ATATCCCGGGACGTAATTGAGATCTTCGATGATTC
RT69	ATATGTCGACGCTAGCTCATAAACGTTGGTACG
RT70	ATATGATATCCAATTTTAGATTTTCTTGGAGATTAAG
RT89	ATATGTCGACCTCAATATATCAAATTCAAACATTCA
RT90	ATATCCCGGGGGAAGGATAGATAGAAAAGCGAG
RT91	ATATGGATCCGTTGGACATTTCTTCTCTCTC
RT92	ATATGTCGACCTAACCGCATGGATTAAAGTTG
RT296	ATGAATACGCAGCGTAAGTCGAAG
RT297	ATATGAGCTC ATGGATAATA CCAACCGTCT TCGTC
RT299	ATATGAGCTCATGGATAACACTGACCGTCGTC
RT320	ATTAAGACGT CGTCGTTTGT GAGAA
RT321	GATATCCACC ATTTACGAAC GATAGC
CF2_NOterSma	TATACCCGGGCTGCAGGATTCTCA
CPC-F	GGATGTATAAACTCGTTGGCGACAG
CPC-R	GCCGTGTTTCATAAGCCAATATCTC
TRY-F	TGTACAGACTTGTCGGTGATAGGTG
TRY-R	GAGTGAAGCTGGCGTCGTTTA
ETC1-F	CGAAGCATCTTAAGACCAATCCAAC
ETC1-R	CCGACAAGCTTATACATCCTGCAA
ETC2-F	CGGTCCCAGTCTTAGGCAAAC
ETC2-R	ACCGACAAGTCTGTACATTCGAGAG
GFP-F	CAGTCCGCCCTGAGCAAAGAC
GFP-R	CCCTTGCTCACCATGGACTTGTA
Act2-F	CTGGATCGGTGGTTCCATTC
Act2-R	CCTGGACCTGCCTCATCATAC

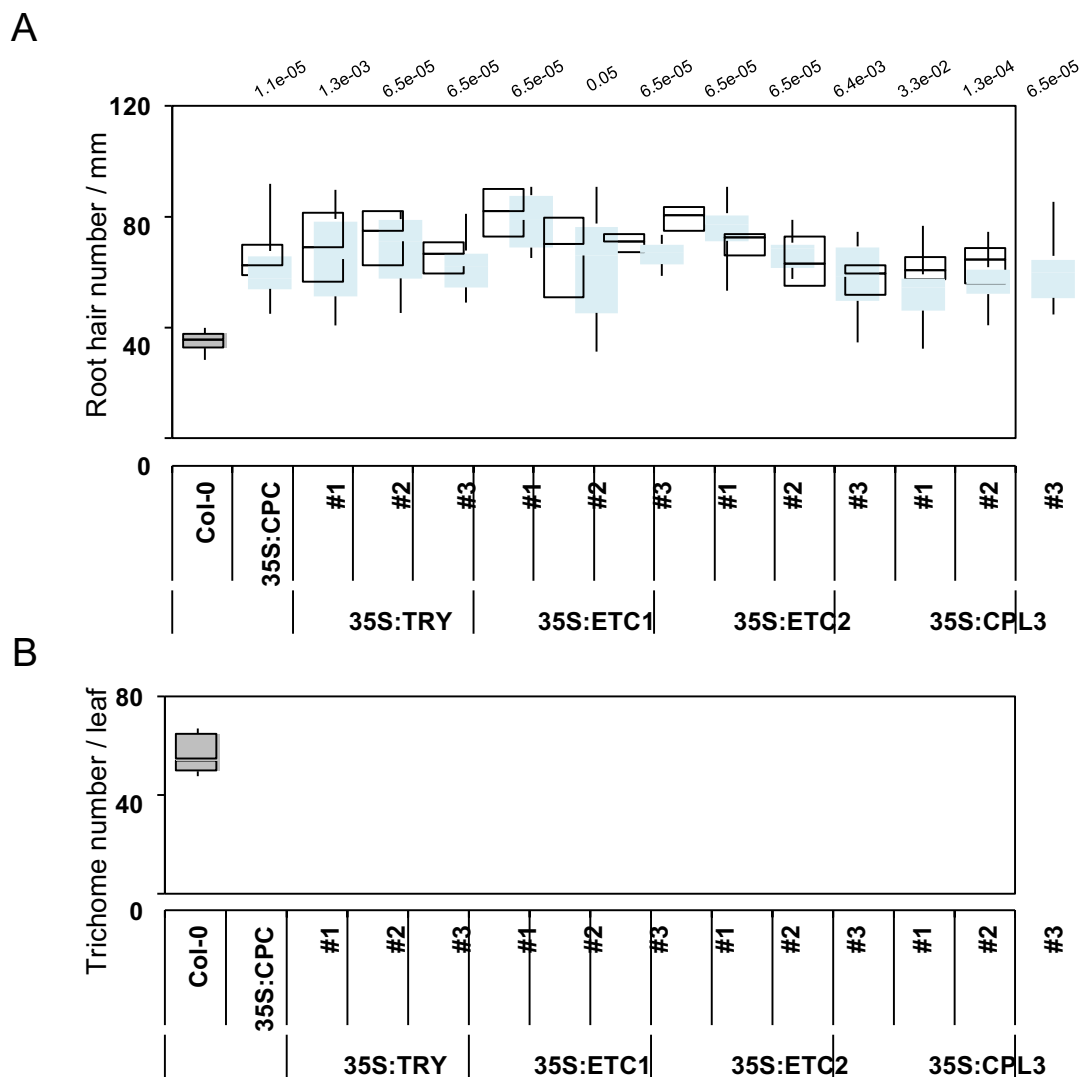


Fig. S1 Epidermal phenotypes of 35S:CPC, 35S:TRY, 35S:ETC1, 35S:ETC2 and 35S:CPL3 transgenic plants.

(A) Box-whisker plots showing root hair formation in five-day-old *Arabidopsis* seedlings of the wild-type Col-0 and 35S:CPC-like MYB transgenic plants. The number of root hairs per mm was determined from ten five-day-old seedlings from each line. p-values between the wild-type Col-0 and the transgenic lines were given above the boxes ($n=10$). (B) Box-whisker plot showing trichome formation on two-week-old *Arabidopsis* third leaves of the wild-type Col-0 and 35S:CPC-like MYB transgenic plants. The number of trichomes per leaf was determined from five two-week-old third leaves from each line ($n=5$). No trichome formation was observed on the two-week-old third leaves for any of the transgenic lines. The 35S:CPC line was described previously (Wada et al., 1997). The 35S:TRY lines were similar to the 35S:TRY line reported by Schellmann et al., (Schellmann et al., 2002). The 35S:ETC1 lines were similar to the 35S:ETC1-1 and 35S:ETC1-2 lines reported by Kirik et al., (Kirik et al., 2004a). The 35S:ETC2 lines were similar to the 35S:ETC2 line reported by Kirik et al., (Kirik et al., 2004b). The 35S:CPL3 lines were described previously (Tominaga et al., 2008).

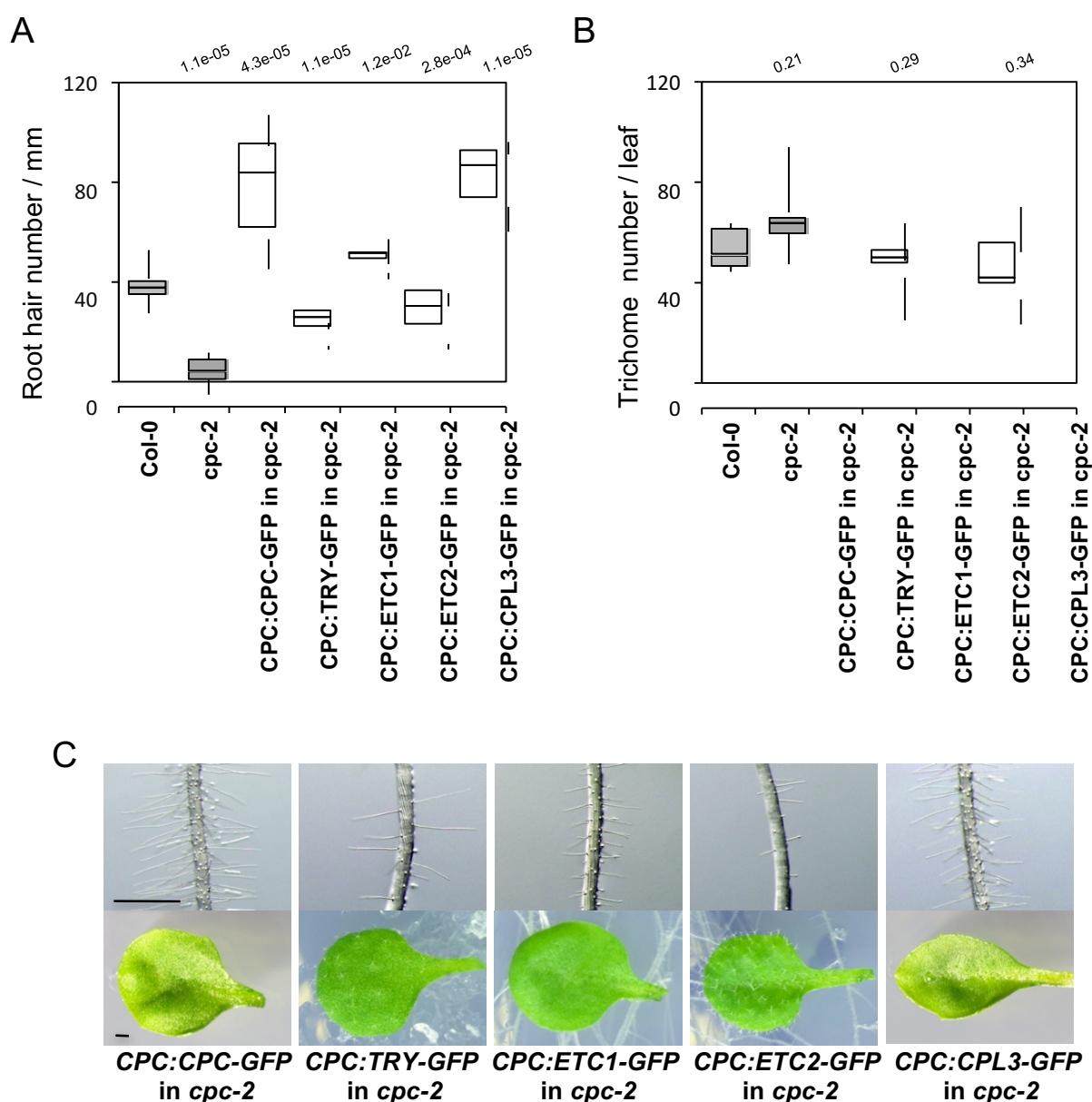
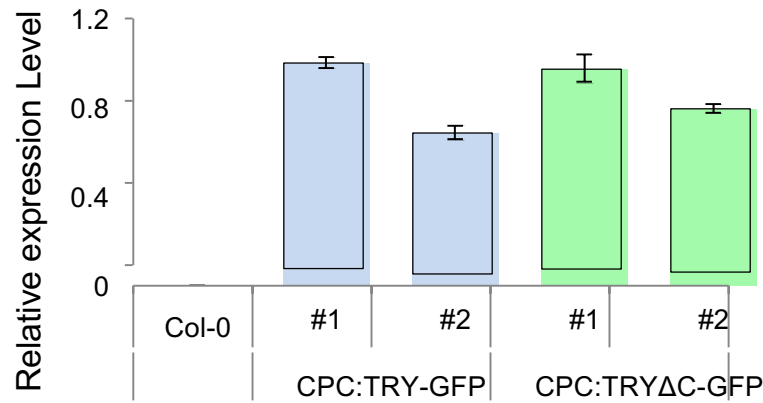


Fig. S2. Epidermal phenotypes of *Arabidopsis cpc-2* mutant expressing *CPC:CPC-GFP*, *CPC:TRY-GFP*, *CPC:ETC1-GFP*, *CPC:ETC2-GFP* and *CPC:CPL3-GFP*.

(A) Box-whisker plots showing root hair formation in five-day-old *Arabidopsis* seedlings of the wild-type Col-0, *cpc-2* mutant and *CPC:CPC-like MYB-GFP* in *cpc-2* transgenic *Arabidopsis* plants (shown in panel C) ($n=10$). (B) Box-whisker plots showing trichome formation on two-week-old *Arabidopsis* third leaves of the wild-type Col-0, *cpc-2* and *CPC:CPC-like MYB-GFP* in *cpc-2* transgenic plants ($n=5$). No trichome formation was observed on two-week-old third leaves in *CPC:CPC-GFP* in *cpc-2*, *CPC:ETC1-GFP* in *cpc-2* or *CPC:CPL3-GFP* in *cpc-2* (shown in panel C). (C) Scale bars: 500 μ m. p-values between the wild-type Col-0 and the transgenic lines were given above the boxes.

A



B

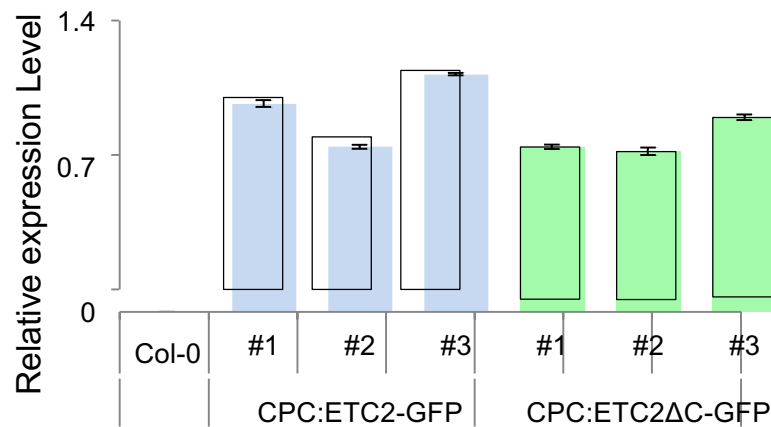


Fig. S3. Analyses for mRNA levels of the *GFP* gene in *CPC:TRYΔC-GFP* and *CPC:ETC2ΔC-GFP* transgenic plants.

Real-time RT-PCR of *GFP* in the wild-type Col-0, *CPC:TRY-GFP*, *CPC:TRYΔC-GFP*, *CPC:ETC2-GFP* and *CPC:ETC2ΔC-GFP*. The mRNA levels of *GFP* relative to *CPC:TRY-GFP*, *CPC:TRYΔC-GFP*, *CPC:ETC2-GFP* and *CPC:ETC2ΔC-GFP* were normalized to *Act2* expression. (A) Relative mRNA levels were calculated as the mRNA levels of each *GFP* gene relative to *CPC:TRY-GFP* (#1). (B) Relative mRNA levels were calculated as the expression levels of each *GFP* gene relative to *CPC:ETC2-GFP* (#1). Error bars indicate SDs, $n=3$.

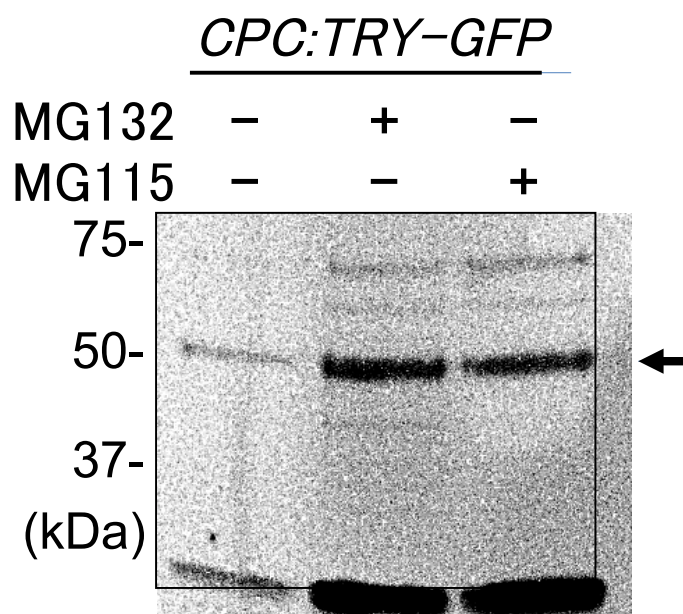


Fig. S4. Effect of MG132 and MG115 treatment on TRY-GFP protein.

Five-day-old seedlings of *CPC:TRY-GFP* transgenic plants were incubated with (+) or without (-) 50 μ M MG132 or 10 μ M MG115 (24 hr). The TRY-GFP fusion protein was detected on the immunoblot with an anti-GFP antibody, as indicated by the arrow. Molecular weights are shown on the left. Each lane was loaded with 20 μ g of total protein.

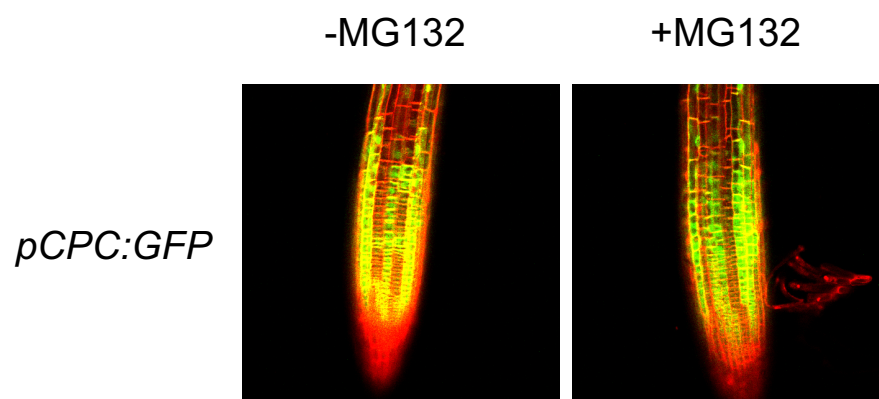


Fig. S5. Effects of MG132 on *CPC:GFP*.

Fluorescence images of roots expressing *CPC:GFP* five-day-old seedlings were treated with MG132 or mock-treated with 0.1% DMSO for 6 hr. Photographs were taken at the same magnification.