

## Supplementary materials

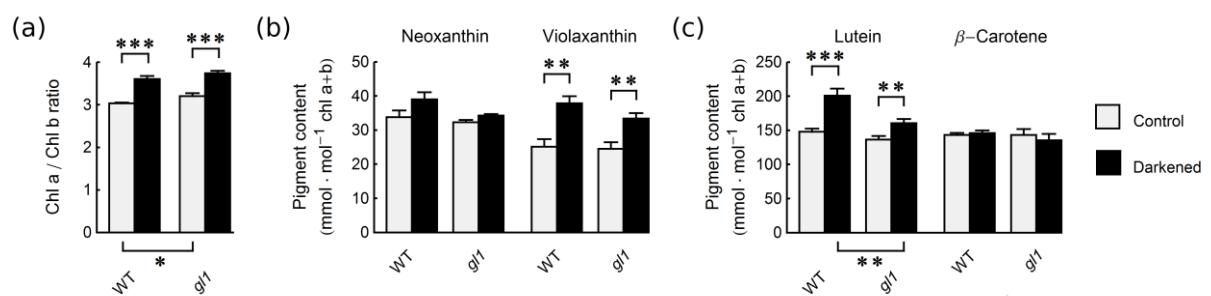
**Table S1.** Primer sequences and annealing temperatures used for real-time PCR experiments.

Name	sequence 5'-3'	annealing T [°C]	amplicon length (bp)
RBCS1AF	TTCGGAATCGGTAAAGGTCAGG	63	96
RBCS1AR	AACGGCGGAAGAGTTAAGTGC		
CABs_RTF	CCAGAGGCATTGCTGAGTTG	53	103
CABs_RTR	CCTTACCAGTGACGATGGCTTG		
SAG12RT2F	GTGTCTACGCGGATGTGAAG	53	129
SAG12RT2R	CAGCAAATGATTACCGCA		
SAG13_RTF	CTCTTCTCGTGACCAACGAGTG	53	104
SAG13_RTR	GCTTGAATATTGACGTTCCCAC		
SEN1_RTF	CACCTCTACAAACATGTGGATC	53	87
SEN1_RTR	GTTGTCGTTGCTTCCTCCATC		
PAL1_RTR	GCTTCCGAATATTCCGGCGTTAA	53	64
PAL1_RTF	CCAAAAACGGTGTGCACT		
UBQ10F	GGCCTTGTATAATCCCTGATGAATAAG	53	61
UBQ10R	AAAGAGATAACAGGAACGGAAACATAGT		
UBCF	CTGCGACTCAGGGATCTTCTAA	53	61
UBCR	TTGTGCCATTGAATTGAACCC		
SANDF	AACTCTATGCAGCATTGATCCACT	53	61
SANDR	TGATTGCATATCTTATGCCATC		

The *CAB* primers anneal to the sequences of two genes belonging to the family of chlorophyll a/b binding proteins, i.e Cab1 (Lhcb1.3 At1g29930) and Cab2 (Lhcb1.1, At1g29920).



**Fig. S1.** 6-week WT and *gll* *A. thaliana* plants after 4 days of individual leaf darkening.  
Darkened leaves are marked with asterisks.



**Fig. S2.** (a) The ratio between chlorophyll a and chlorophyll b, and (b, c) the molar content of carotenoids normalized by the molar content of chlorophylls, in control and 4-day-darkened leaves of WT and *gll* *A. thaliana* plants. Each bar corresponds to an average of 4 biological replicates. Asterisks indicate statistically significant differences of means of the log-transformed values (P values adjusted with the Hankel method: \*P = 0.01–0.05; \*\*P = 0.001–0.01, \*\*\*P < 0.001).