



Supplemental Figure 1. Coleoptile lengths of RNAi *CRY1a/b* and *CRY2* seedlings. Coleoptiles of 2-week-old seedlings from *CRY1a/b* or *CRY2* RNAi or null segregant control lines grown under BL ($23 \mu\text{mol}\cdot\text{m}^{-2}\cdot\text{sec}^{-1}$) or in darkness were measured. Each point is the average of nine measurements \pm S.E.

Supplemental Table 1. Primers used for construction of Hv-*CRY1a/b* and Hv-*CRY2* RNAi hairpins.

Product	Forward primer (5'-3')	Reverse primer (5'-3')
CRY1hairpin BamHI/SmaI	A AGGATCC GAGGATCAATTCAGGTGACTTGA	AA CCCGGG CTCTCGCAGGCCGATGGAG
CRY1hairpin KpnI/SpeI	A AGGTACC GAGGATCAATTCAGGTGACTTGA	AA ACTAGT CTCTCGCAGGCCGATGGAG
CRY2hairpin BamHI/SmaI	A AGGATCCA AGGAACTGACGGGCTTAAATAA	AA CCCGGG CAGTCTTCACGATCACCCCTTG
CRY2hairpin KpnI/SpeI	A AGGTACCA AGGAACTGACGGGCTTAAATAA	AA ACTAGT CAGTCTTCACGATCACCCCTTG

Bold letters indicate restriction sites

Supplemental Table 2. Sequences used in the Hv-*CRY1a/b* and Hv-*CRY2* RNAi hairpin constructs.

Sequence used for the hairpin against Hv-*CRY1a/b*

GAGGATCAATTCAGGTGACTTGACGAGGTGCTCATCAGACGACCTGATTTTCGAAGACGACTCG
GAGAGGGGGAGCAACGCGCTGCTCGCACGGGCGTGGTCCGCCGGGTGGCAGAACGCCGACAA
GGCTTTCACAGCCTTCATCAACGGCCCGCTCATCGACTACTCCGTCAACCGCAAGAAGGCCGACA
GTGCAAACACCTCACTGCTCTCCCTTACCTGCACTTTGGCGAGCTCAGCGTCCGCAAGGTCTTCC
ATCAAGTACGGATGAAGCAGCTAACATGGAGCAACGAGAGCAACCGTGACGGCGAGGAAGGCT

Sequence used for the hairpin against Hv-*CRY2*

AAGGAACTGACGGGCTTAAATAAACAGACCATTTGTGTTGATGTGATCAAGGCCTCAAAGATGG
AAGACACAGGCTCCATAGTAAATTCTCCGATATCAAGGAAAAGATCCAGCAGCGGGAGTGTGTT
TGATGTCCCATCTTGTTTCGTCTTCAGTCGAAGTGCGCTCCAGAATCAACGTCCTGGTGGTTATTT
TGTTGGGTCATCAAATAACATCCTGCAGAAAGCAGAGAGGAACTGTTTTGATAAGGCAGAAGAC
GATGACAGTGCCACAGTGGTACAAACACCTCGAGAGCATCCAAGAGACCTGCCGCCTCACAAG

Supplemental Table 3. Primer sequences used for qRT-PCR.

Gene	Forward primer (5'-3')	Reverse primer (5'-3')	Accession
Hv- <i>ACT</i>	GCCGTGCTTCCCTCTATG	GCTTCTCCTTGATGCCCTTA	AY145451
Hv- <i>ABA8'OH-1</i>	AGCACGGACCGTCAAAGTC	TGAGAATGCCTACGTAGTG	AK333121
Hv- <i>CIP8</i>	CGAGGGTTTCGTGTACACCTC	ACACACGGAGCACTCCTCTC	Barley1_18584
Hv- <i>CRY1a/b</i>	TCAGCCAGAGCCTCAAGCAC	GTCGTAGAGGTGGTTGAAGAAG	DQ201150
Hv- <i>CRY2</i>	AAGAGACCTGCCGCCTCACAA	CGAAACCGTTTCGTCCAGGTGT	DQ201156
Hv- <i>ELIP58</i>	TTCTCCGTAGCGTCGCTGCTG	AAAACCCACAGCGCTGCAATC	X15693
Hv- <i>ELIP90</i>	ATGAACGCCAACGCGGAActCT	AGTACATGTTGTGTTATCCTGTC	X15692
Hv- <i>HY5</i>	AAGAAGAATTCGGAGCTGGAAG	TCTGTGCTATTGACCCTCACTT	Barley1_15369
Hv- <i>NCED1</i>	CCAGCACTAATCGATTCC	GAGAGTGGTGATGAGTAA	CD884104
Hv- <i>NCED2</i>	CATGGAAAGAGGAAGTTGC	GAAGCAAGTGTGAGCTAAC	CA731387