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CRY2 (C) Antibody, Rabbit Polyclonal

Cat#: R3209-2

Quantity: 100 ul

Predicted | Observed M.W.: 69 | 69, 120 kDa

Lot#: Refer to vial

Application: WB

Uniprot ID: Q96524

Background:

CRYPTOCHROME 2 (CRY2) is a blue light receptor mediating blue-light regulated cotyledon expansion and flowering time. CRY2 is a positive regulator of the flowering-time gene CONSTANS. CRY2 is involved in blue-light induced stomatal opening and triggering chromatin decondensation. An 80-residue motif (NC80) is sufficient to confer CRY2's physiological function. It is proposed that the PHR domain and the C-terminal tail of the unphosphorylated CRY2 form a "closed" conformation to suppress the NC80 motif in the absence of light. In response to blue light, the C-terminal tail of CRY2 is phosphorylated and electrostatically repelled from the surface of the PHR domain to form an "open" conformation, resulting in derepression of the NC80 motif and signal transduction to trigger photomorphogenic responses. Cry2 phosphorylation and degradation both occur in the nucleus.

Other Names:

AT-PHH1, ATCRY2, CRYPTOCHROME 2, FHA, PHH1

Source and Purity:

Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the C-terminal region of *arabidopsis thaliana* CRY2 (At1g04400). Antibodies were purified by affinity purification using immunogen.

Storage Buffer and Condition:

Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN₃. Store at -20 °C. Stable for 6 months from date of receipt.

Species Specificity:

Arabidopsis thaliana

Tested Applications:

WB: 1:500-1:2,000 (detect endogenous protein*)

*: The apparent protein size on WB may be different from the calculated M.W. due to modifications.

**For research use only. Not for therapeutic or diagnostic purposes.
Abiocode, Inc., 29397 Agoura Rd., Ste 106, Agoura Hills, CA 91301**

Product Data:

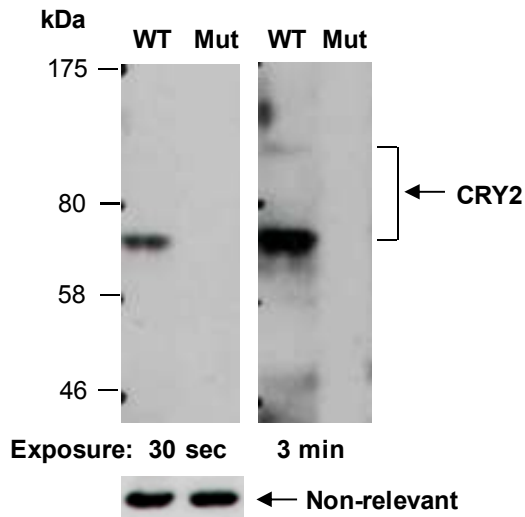


Fig 1. Western blot analysis of equal amounts of protein extracts (Cat# L3209) from wild type (WT) or *CRY2*-deficient mutant Arabidopsis leaves harvested in SDS buffer 12 h post light stimulation under the long-day photoperiod condition, using anti-*CRY2* (C) (R3209-2) at RT for 2 h. The observed M.W. of *CRY2* is 69 kD and 120 kD (present under longer exposure). The same filter was re-probed with a non-relevant antibody for loading controls.