



## Rabbit anti-Arabidopsis thaliana CRY2 (C-term) Polyclonal Antibody (CABT-Z052R)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Immunogen	Antibodies were produced by immunizing animals with a GST-fusion protein containing the C-terminal region of arabidopsis thaliana CRY2.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Arabidopsis thaliana
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	WB Recommended dilution: WB: 1:500-1:2,000 (detect endogenous protein*)
Molecular Weight	Predicted M.W.: 69 kDa; Observed M.W.: 69, 120 kDa
Preparation	Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the C-terminal region of arabidopsis thaliana CRY2 (At1g04400).
Format	Liquid
Concentration	Lot specific
Size	100 μΙ
Buffer	Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN3.
Preservative	0.01% NaN3

45-1 Ramsey Road, Shirley, NY 11967, USA

Email: info@creative-diagnostics.com

Tel: 1-631-624-4882 Fax: 1-631-938-8221

Storage	Store at -20°C. Stable for 6 months from date of receipt.
Ship	Wet ice

## **BACKGROUND**

Introduction

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.

Keywords

AT-PHH1;ATCRY2;CRYPTOCHROME 2;FHA;PHH1

## **GENE INFORMATION**

Gene Name	CRY2
Entrez Gene ID	839529
UniProt ID	Q96524