



Order: (888)-282-5810 (Phone)  
(818)-707-0392 (Fax)  
[order@abiocode.com](mailto:order@abiocode.com)  
Web: [www.Abiocode.com](http://www.Abiocode.com)

---

## **HY5 (N) Antibody, Rabbit Polyclonal**

**Cat#: R1245-1b**

**Quantity: 100 ul**

**Predicted | Observed M.W.: 18 | 18, 30 kDa**

**Lot#: Refer to vial**

**Application: WB**

**Uniprot ID: O24646**

### **Background:**

Transcription factor HY5 is a nuclear protein that belongs to the bZIP family, which promotes photomorphogenesis in light. HY5 acts downstream of the light receptor network and directly affects transcription of light-induced genes. HY5 is specifically involved in the blue light specific pathway, suggesting that it participates in transmission of cryptochromes (CRY1 and CRY2) signals to downstream responses. In darkness, its degradation prevents the activation of light-induced genes.

### **Other Names:**

Transcription factor HY5, Protein LONG HYPOCOTYL 5, bZIP transcription factor 56, AtbZIP56, BZIP56

### **Source and Purity:**

Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the N-terminal region of *arabidopsis thaliana* HY5 (At5g11260). 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% NaN<sub>3</sub>. Store at -20 °C. Stable for 6 months from date of receipt.

### **Species Specificity:**

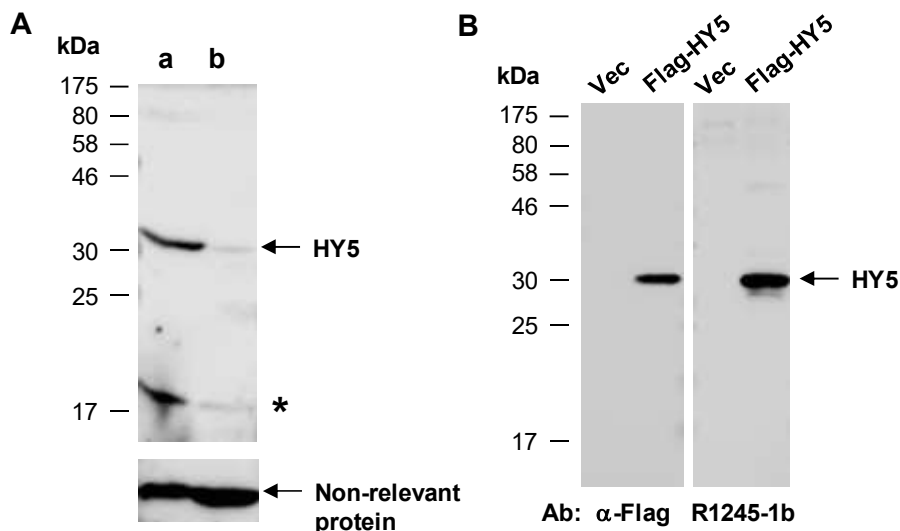
Arabidopsis thaliana

### **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.

**Product Data:**



**Fig 1. A)** Western blot of total cell extracts from *a.* light-grown or *b.* 24 h dark-grown *Arabidopsis thaliana*; using anti-HY5 (N) (R1245-1b) at RT for 2 h (top). The observed M.W. for HY5 is 30 kD [Osterlund M. et al., (2000) *Nature* 405:462]. The 18 kD band indicated by \* may represent non-modified HY5. The same filter was re-probed with a non-relevant Ab for loading control (bottom). **B)** Same as in **A** except that total cell extracts from human 293T cells transfected with the empty vector (Vec) or Flag-HY5 were used for Western blot, using anti-Flag (*a-Flag*) or anti-HY5 (N) (R1245-1b).

**References cited for this product:**

1. Zheng Y., Cui X., Su L., Fang S., Chu J., Gong Q., Yang J., Ziqiang Zhu Z. Jasmonate inhibits COP1 activity to suppress hypocotyl elongation and promote cotyledon opening in etiolated *Arabidopsis* seedlings. *Plant J.*, 2017, 90:1144–1155.
2. Yuan T.T., Heng-Hao Xu H.H., Zhang Q., Zhang L.Y., Lu Y.T. The COP1 Target SHI-RELATED SEQUENCE5 Directly Activates Photomorphogenesis-Promoting Genes. *Plant Cell*, 2018, 30: 2368–2382.
3. Han Cheng H., Liang Q., Chen, X., Zhang Y., Qiao F., Guo D. Hydrogen peroxide facilitates *Arabidopsis* seedling establishment by interacting with light signalling pathway in the dark. *Plant Cell Environ.* 2018;1–16.