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BRI1 (vPair™) Antibodies

Cat#: R3283-vp

Lot#: Refer to vial

Predicted | Observed M.W.: 131 | 180 kDa

Uniprot ID: O22476

Application: WB

Quantity: 50 ul BRI1 (N) (R3283-1) Rabbit Polyclonal Antibody &
50 ul BRI1 (C) (R3283-3) Rabbit Polyclonal Antibody

Product Introduction:

vPair™ antibodies represent a pair of fully characterized antibodies that recognize two different regions of a target protein. The product is developed by Abiocode to address whether the signal observed truly represents the protein of interest, an often encountered issue in antibody-based assays. The use of a pair of fully characterized vPair™ antibodies in the same assay can validate signal specificity since vPair™ antibodies recognize two independent epitopes of the same protein. Different sets of vPair™ antibodies are developed at Abiocode to work with specific applications, including antibody arrays, Western blot, IP-Western, ChIP, IHC, and FACS.

Background:

Protein BRASSINOSTEROID INSENSITIVE 1 (BRI1) is a plasma membrane localized leucine-rich repeat receptor kinase involved in brassinosteroid signal transduction. BRI1 ligand is brassinolide which binds at the extracellular domain. Binding results in phosphorylation of the kinase domain which activates the BRI1 protein leading to BR responses. Residue T-1049 and either S-1044 or T-1045 were essential for kinase function *in vitro* and normal BRI1 signaling in planta. The structure of BRI1 ligand-binding domain has been determined at 2.5Å resolution. Although BAK1 and BRI1 alone localize in the plasma membrane, when BAK1 and BRI1 are coexpressed, the heterodimer BAK1/BRI1 they form is localized in the endosome. BRI1 appears to be involved in the autonomous pathway that regulates the transition to flowering, primarily through its effects on FLC expression levels, as uncovered by double mutant analyses. This most likely occurs as a result of BRI1-dependent effects on histone acetylation, but not histone triMeH3K4 methylation, at the FLC locus.

Other Names:

Protein BRASSINOSTEROID INSENSITIVE 1, AtBRI1, Brassinosteroid LRR receptor kinase

Source and Purity:

Rabbit polyclonal antibodies were produced by immunizing animals with GST-fusion proteins containing either the N-terminal [BRI1 (N) (R3283-1)] or the C-terminal [BRI1 (C) (R3283-3)] region of *arabidopsis thaliana* BRI1 (At4g39400). Antibodies were purified by affinity purification using immunogen.

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

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.

Product Data:

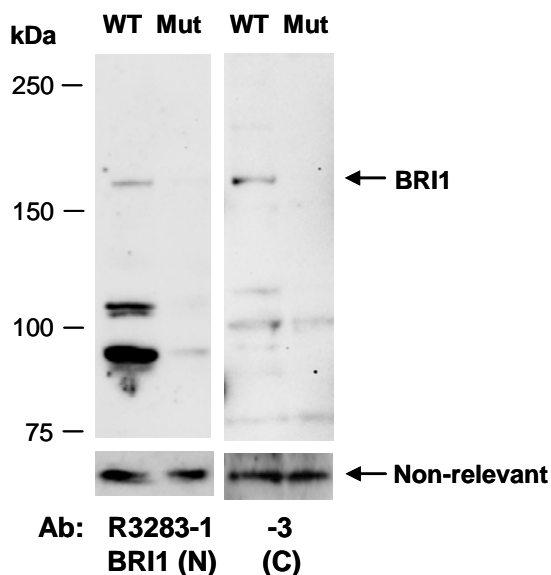


Fig 1. Western blot analysis of equal amounts of protein extracts from wild type (WT) or BRI1-deficient mutant arabidopsis leaves, using 2 independent Abs against 2 distinct regions of arabidopsis BRI1 at RT for 2 h. The same filters were re-probed with a non-relevant ab for loading controls.