



Rabbit anti-Arabidopsis thaliana PID (N-term) Polyclonal Antibody (CABT-Z121R)

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 N-terminal region of arabidopsis thaliana PID.
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	49 kDa
Preparation	Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the N-terminal region of arabidopsis thaliana PID (AT2G34650).
Format	Liquid
Concentration	Lot specific
Size	100 µl
Buffer	Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN ₃ .
Preservative	0.01% NaN ₃

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

Introduction

PINOID is a protein serine/threonine kinase that may act as a positive regulator of cellular auxin efflux, as a binary switch for PIN polarity, and as a negative regulator of auxin signaling. Recessive mutants exhibit similar phenotypes as pin-formed mutants in flowers and inflorescence but distinct phenotypes in cotyledons and leaves. PINOID is expressed in the vascular tissue proximal to root and shoot meristems, shoot apex and embryos; and is induced by auxin. Overexpression of PINOID results in phenotypes in the root and shoot similar to those found in auxin-insensitive mutants. PINOID physically interacts with TCH3 (TOUCH3) and PID-BINDING PROTEIN 1 (PBP1), a previously uncharacterized protein containing putative EF-hand calcium-binding motifs. PINOID acts together with ENP (ENHANCER OF PINOID) to instruct precursor cells to elaborate cotyledons in the transition stage embryo. PINOID autophosphorylation is required for the ability of PINOID to phosphorylate an exogenous substrate. PINOID activation loop is required for PDK1-dependent PINOID phosphorylation. In addition, PINOID kinase activity is critical for the inhibition of root hair growth and for maintaining the proper subcellular localization of PINOID.

Keywords	Protein kinase PINOID;Protein kinase ABRUPTUS;ABR;At2g34650;T31E10.1;PID
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GENE INFORMATION

Gene Name	PID
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Entrez Gene ID	818030
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UniProt ID	O64682
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