



Rabbit anti-Arabidopsis thaliana JAR1 (Middle region) Polyclonal Antibody (CABT-Z088R)

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 middle region of arabidopsis thaliana JAR1.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Arabidopsis thaliana
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	WB Recommended dilution: WB: 1:1,000-1:3,000 (detect endogenous protein*)
Molecular Weight	Predicted M.W.: 55-64 kDa; Observed M.W.: 65-78 kDa
Preparation	Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the middle region of arabidopsis thaliana JAR1 (At2g46370).
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	Protein JASMONATE RESISTANT 1 (JAR1) catalyzes the synthesis of jasmonates-amino acid conjugates by adenylation; can use Ile, Val, Leu and Phe as conjugating amino acids on jasmonic acid (JA) and 9,10-dihydro-JA substrates, and to a lower extent, on 3-oxo-2-(2Z-pentenyl)-cyclopentane-1-butyric acid (OPC-4) and 12-hydroxy-JA (12-OH-JA). JAR1 can synthesize adenosine 5-tetraphosphate in vitro. JAR1 is required for the JA-mediated signaling pathway that regulates many developmental and defense mechanisms, including growth root inhibition, vegetative storage proteins (VSPs) accumulation, induced systemic resistance (ISR), response to wounding and herbivores, tolerance to ozone O ₃ (probably having a role in lesion containment). JAR1 plays an important role in the accumulation of JA-Ile in response to wounding, both locally and systemically; promotes JA responding genes especially in distal part of wounded plants, via the JA-Ile-stimulated degradation of JAZ repressor proteins by the SCF(COI) E3 ubiquitin-protein ligase pathway.
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Keywords	Jasmonic acid-amido synthetase JAR1;Protein FAR-RED INSENSITIVE 219;FIN219
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GENE INFORMATION

Gene Name	JAR1
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Entrez Gene ID	819244
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UniProt ID	Q9SKE2
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