



# Rabbit anti-Arabidopsis thaliana AHK3 (N-term) Polyclonal Antibody (CABT-Z018R)

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

## PRODUCT INFORMATION

<b>Immunogen</b>	Antibodies were produced by immunizing animals with a GST-fusion protein containing the N-terminal region of arabidopsis thaliana AHK3.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Arabidopsis thaliana
<b>Purification</b>	Antigen affinity purification
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB Recommended dilution: WB: 1:500-1:2,000 (detect endogenous protein*)
<b>Molecular Weight</b>	116 kDa
<b>Preparation</b>	Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the N-terminal region of arabidopsis thaliana AHK3 (AT1G27320).
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	100 µl
<b>Buffer</b>	Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN <sub>3</sub> .
<b>Preservative</b>	0.01% NaN <sub>3</sub>

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

**Introduction**

AHK3 is a cytokinins (CK) receptor related to bacterial two-component regulators. AHK3 functions as a histidine kinase and transmits the stress signal to a downstream MAPK cascade. AHK3 undergoes an ATP-dependent autophosphorylation at a conserved histidine residue in the kinase core, and a phosphoryl group is then transferred to a conserved aspartate residue in the receiver domain. In the presence of cytokinin, AHK3 feeds phosphate to phosphorelay-integrating histidine phosphotransfer protein (HPT) and activates subsequent cascade. AHK3 is involved in meristems establishment in seedlings. AHK3 is a redundant negative regulator of drought and salt stress responses and abscisic acid (ABA) signaling. Together with AHK2, AHK3 plays a negative regulatory role in cold stress signaling via inhibition of ABA response, occurring independently of the cold acclimation pathway. AHK3 is a redundant positive regulator of cytokinin signaling that regulates many development process including seed germination, cell division, seed size, chlorophyll retention during leaf senescence, root repression and shoot promotion.

<b>Keywords</b>	Histidine kinase 3;Arabidopsis histidine kinase 3;AtHK3;Protein AUTHENTIC HIS-KINASE 3;Protein ORESARA 12;ORE12;At1g27320;F17L21.11
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## GENE INFORMATION

<b>Gene Name</b>	AHK3
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<b>Entrez Gene ID</b>	<a href="#">839621</a>
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<b>UniProt ID</b>	<a href="#">Q9C5U1</a>
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