Datasheet for ABIN349649

anti-PCK1 antibody

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Overview

Quantity:	50 µg
Target:	PCK1
Reactivity:	Zea mays, Arabidopsis thaliana, Barley, Nicotiana tabacum, Phaeodactylum tricornutum, Synechocystis
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PCK1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH-conjugated synthetic peptide well conserved PEPC1 and sequences from different plant species including Arabidopsis thaliana Q9MAH0, At1g53310 (PEPC 1), Q84VW9, At1g14940 (PEPC 3). The peptide chosen to elicit this antibody is also perfectly conserved in bacterial type of this enzyme NP_177043.2 (PEPC 4)
Characteristics:	Expected / apparent Molecular Weight of the Antigene: 110 / 105 kDa
Purification:	serum

Target Details

Target:	PCK1
Alternative Name:	Phosphoenolpyruvate Carboxylase (PCK1 Products)
Background:	AGI Code: At1g53310, At1g14940

Target Details

	PEPC (phosphoenolpyruvate carboxylase), EC=4.1.1.31, belongs to an enzyme family of carboxy-lyases that is catalyzing adding fo carbon dioxide to phosphoenolpyruvate (PEP) to form oxaloacetate. Alternative names: PEPCase 1, PEPCase 3, PEPC 1, PEPC 3
Molecular Weight:	expected: 110 kDa, apparent: 105 kDa
NCBI Accession:	NP_177043
UniProt:	Q84VW9, Q9MAH0
Pathways:	Positive Regulation of Peptide Hormone Secretion, Carbohydrate Homeostasis

Application Details

Application Notes:	Recommended Dilution: 1 : 1000 with standard ECL (WB).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	For reconstitution add 200 µL of sterile water.
Buffer:	PBS pH 7.4
Handling Advice:	Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes. Once reconstituted make aliquots to avoid repreated freeze-thaw cycles.
Storage:	-20 °C

Publications

Product cited in:	Chang, Jeon, Gu, Pack, Jin: "Conversion of carbon dioxide to oxaloacetate using integrated carbonic anhydrase and phosphoenolpyruvate carboxylase." in: **Bioprocess and biosystems engineering**, (2013) (PubMed). Aragón, Pascual, González, Escalona, Carvalho, Amancio: "The physiology of ex vitro pineapple (Ananas comosus L. Merr. var MD-2) as CAM or C3 is regulated by the environmental conditions: proteomic and transcriptomic profiles." in: **Plant cell reports**, (2013) (PubMed). Wostrikoff, Clark, Sato, Clemente, Stern: "Ectopic expression of Rubisco subunits in maize

mesophyll cells does not overcome barriers to cell type-specific accumulation." in: **Plant physiology**, Vol. 160, Issue 1, pp. 419-32, (2012) (PubMed).

Images

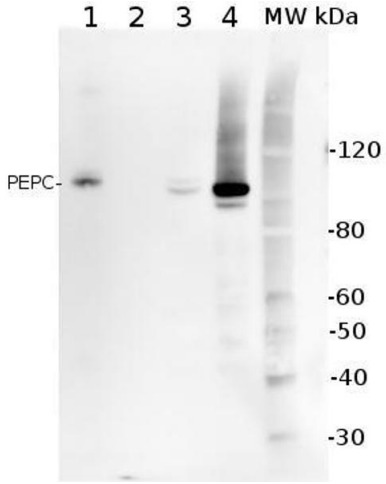

Image 1. 5ug of total protein from (1) Arabidopsis thaliana leaf extracted with Protein ExtrationBuffer, PEB , (2) Spinacia oleracea total cell, extracted with PEB, (3)Hordeum vulgare total cell extracted with PEB, (4) Zea mays total cell extracted withPEB, were separated on 4-12% NuPage (Invitrogen) LDS-PAGE and blotted 1h toPVDF. Blots were blocked immediately following transfer in 2% ECL Advance blockingreagent (GE Healthcare) in 20 mM Tris, 137 mM sodium chloride pH 7.6 with 0.1% (v/v)Tween-20 (TBS-T) for 1h at room temperature with agitation. Blots were incubated in theprimary antibody at a dilution of 1: 10 000 for 1h at room temperature with agitation. Theantibody solution was decanted and the blot was rinsed briefly twice, then washed oncefor 15 min and 3 times for 5 min in TBS-T at room temperature with agitation. Blots wereincubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated,from Abcam) diluted to 1:50 000 in 2% ECL Advance blocking solution for 1h at roomtemperature with agitation. The blots were washed as above and developed for 5 minwith ECL Advance detection reagent according the manufacturers instructions. Images ofthe blots were obtained using a CCD imager (FluorSMax, Bio-Rad) and Quantity Onesoftware (Bio-Rad).