Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-4163-0100

Phospho Enol Pyruvate Carboxylase Antibody

Overview

Description:	Anti-Phospho Enol Pyruvate Carboxylase(RABBIT) Antibody - 200-4163-0100
Item No.:	200-4163-0100
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Maize
Host Species:	Rabbit

Product Details

Background:	Anti-Phospho Enol Pyruvate Carboxylase antibody detects PEP. Phosphoenolpyruvate carboxylase is an enzyme in the family of carboxy-lyases that catalyzes the addition of bicarbonate to phosphoenolpyruvate (PEP) to form the four-carbon compound oxaloacetate. This reaction is used for carbon fixation in so-called "CAM" and "C4" plants where it plays a key role in photosynthesis. The enzyme is also found in some bacteria, but not in animals or fungi. Anti-Phospho Enol Pyruvate Carboxylase Antibody is ideal for investigators involved in Cell Signaling, biochemistry and Signal Transduction research.
Synonyms:	rabbit anti-Phospho Enol Pyruvate Carboxylase Antibody, rabbit anti-PEPC 1 antibody, PEPCase 1 antibody, Phosphoenolpyruvate carboxylase 1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	pepc
Reactivity:	Maize
Immunogen Type:	Native Protein
Immunogen:	Anti-Phospho Enol Pyruvate Carboxylase Antibody was produced by repeated immunizations with maize leaves Phospho-enol-pyruvate Carboxylase.

Purity/Specificity:	Anti-Phospho Enol Pyruvate Carboxylase is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum as well as purified and partially purified Phospho-enol-Pyruvate Carboxylase [Maize]. Cross reactivity against Phospho-enol-Pyruvate Carboxylase from other tissues and species may occur but have not been specifically determined.
Relevant Links:	• UniProtKB - B8XPZ2 • NCBI - ACN80021.1 • GeneID - 542372

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Phospho Enol Pyruvate Carboxylase antibody has been tested by western blotting and ELISA is suitable for IHC. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IHC:	User Optimized
WB:	1:1,000 - 1:4,000

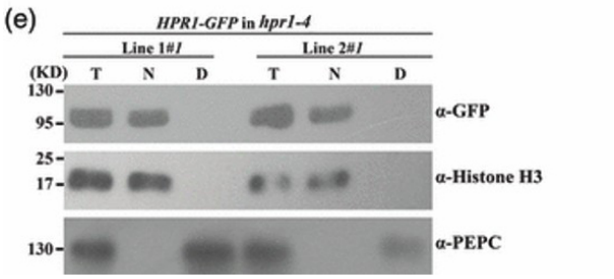
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

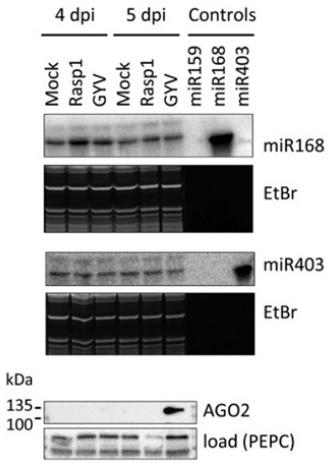
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

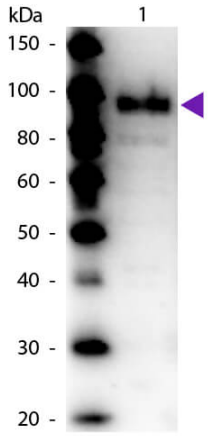
Images



Western Blot
(e) Subcellular fractionation and immunoblot assay. Total protein, the nuclei-depleted fraction and the nuclei-enriched fraction were loaded onto an SDS–PAGE gel and subjected to immunoblot analysis. Histone H3 and PEPC were used as nuclear and cytosolic markers. T, total protein extracts; N, nuclei-enriched fraction; D, nuclei-depleted fraction. Samples from two transgenic lines of hpr1-4 carrying HPR1–GFP were examined. All experiments were repeated at least three times with similar results. Fig 6. PMID: 22035198



Western Blot
Effect of infection with two ToRSV isolates on the expression of miR168 and miR403. Accumulation of miR168 and miR403 in mock-inoculated plants and in ToRSV-Rasp1 or ToRSV-GYV infected plants. Plants were grown at 21 °C and total RNAs were extracted from pools of symptomatic systemically-infected leaves or equivalent leaves of mock-inoculated plants at the indicated time point. miRNAs were detected by Northern blots using specific locked-nucleic acid probes. EtBr staining of total RNA are shown as load controls. Oligonucleotides (33 fmoles) corresponding to the sequence of three miRNAs were used as controls on the right side of the gel to demonstrate the specificity of the probes. Accumulation of AGO2 protein was also tested by Western blots using the same pool of leaves. Load control is the phosphoenolpyruvate carboxylase (PEPC) protein detected by Western blot. Fig 4. PMID: 30195250



Western Blot
Western Blot of Rabbit Anti-Phospho Enol Pyruvate (PEP) Carboxylase antibody. Lane 1: Phospho Enol Pyruvate (PEP) Carboxylase. Lane 2: None. Load: 50 ng per lane. Primary antibody: Phospho Enol Pyruvate (PEP) Carboxylase primary antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Blocking: MB-070 for 30 min at RT.
Predicted/Observed size: 100 kDa, 100 kDa for Phospho Enol Pyruvate (PEP) Carboxylase. Other band(s): None.

References

- Paudel DB et al. Expression and antiviral function of ARGONAUTE 2 in Nicotiana benthamiana plants infected with two isolates of tomato ringspot virus with varying degrees of virulence. *Virology* (2018)
- Pan H et al. HPR1, a component of the THO/TREX complex, plays an important role in disease resistance and senescence in Arabidopsis. *Plant J.* (2012)

Disclaimer