abcam

Product datasheet

Anti-PCB antibody [3H2AD9] ab110314

3 References 3 Images

Overview

Product name	Anti-PCB antibody [3H2AD9]
Description	Mouse monoclonal [3H2AD9] to PCB
Host species	Mouse
Tested applications	**Suitable for:** ICC/IF, Flow Cyt, IP
Species reactivity	**Reacts with:** Human
Immunogen	Full length native protein (purified). This information is considered to be commercially sensitive.
Positive control	Human fibroblast and HeLa cells; Human liver tissue lysate.
General notes	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As Product was previously marketed under the MitoSciences sub-brand.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
Purification notes	ab110314 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. Purity: >95% by SDS-PAGE.
Clonality	Monoclonal
Clone number	3H2AD9

Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab110314 in the following tested applications.

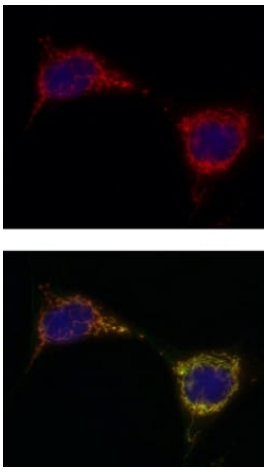
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml. For 2 hours.
Flow Cyt		Use a concentration of 1 µg/ml. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

Target

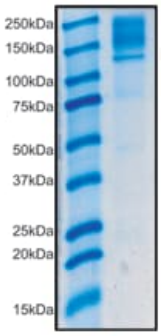
Function	Pyruvate carboxylase catalyzes a 2-step reaction, involving the ATP-dependent carboxylation of the covalently attached biotin in the first step and the transfer of the carboxyl group to pyruvate in the second. Catalyzes in a tissue specific manner, the initial reactions of glucose (liver, kidney) and lipid (adipose tissue, liver, brain) synthesis from pyruvate.
Pathway	Carbohydrate biosynthesis; gluconeogenesis.
Involvement in disease	Defects in PC are the cause of pyruvate carboxylase deficiency (PC deficiency) [MIM:266150]. PC deficiency leads to lactic acidosis, mental retardation and death. It occurs in three forms: mild or type A, severe neonatal or type B, and a very mild lacticacidemia.
Sequence similarities	Contains 1 ATP-grasp domain. Contains 1 biotin carboxylation domain. Contains 1 biotinyl-binding domain. Contains 1 carboxyltransferase domain.
Cellular localization	Mitochondrion matrix.

Images



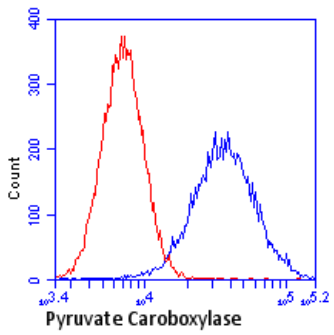
Immunocytochemistry/ Immunofluorescence - Anti-PCB antibody [3H2AD9] (ab110314)

Upper image shows: Immunocytochemistry analysis using ab110314 at 5µg/ml staining PCB in Human fibroblast cells (4% paraformaldehyde fixed and 0.1% Triton X-100 permeabilized) followed by Alexa Fluor® 594 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1 hour (red).
Note: The target protein locates to the mitochondrial matrix.
Lower image shows cells co-stained with an antibody against PDH (green), an enzyme also located in the mitochondrial matrix. The composite image shows an identical mitochondrial pattern for both antibodies indicated by merged orange color.



Immunoprecipitation - Anti-PCB antibody [3H2AD9] (ab110314)

Detection of ab110314 by immunoprecipitation staining of 130kDa PCB in human liver lysate.



Flow Cytometry - Anti-PCB antibody [3H2AD9] (ab110314)

Flow cytometric analysis using ab110314 at 1µg/ml staining PCB in HeLa cells (blue). Isotype control antibody (red).

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