


## Product datasheet

# Alexa Fluor® 405 Anti-PDHB antibody [EPR11097(B)] ab210029

Recombinant RabMAb

[2 Images](#)

### Overview

<b>Product name</b>	Alexa Fluor® 405 Anti-PDHB antibody [EPR11097(B)]
<b>Description</b>	Alexa Fluor® 405 Rabbit monoclonal [EPR11097(B)] to PDHB
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Alexa Fluor® 405. Ex: 402nm, Em: 421nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Flow Cyt (Intra): HeLa cells.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR11097(B)
<b>Isotype</b>	IgG

### Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab210029 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
Flow Cyt (Intra)		1/50. The cellular localisation of this product has been verified in ICC/IF.

## Target

### Function

The pyruvate dehydrogenase complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO<sub>2</sub>. It contains multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3).

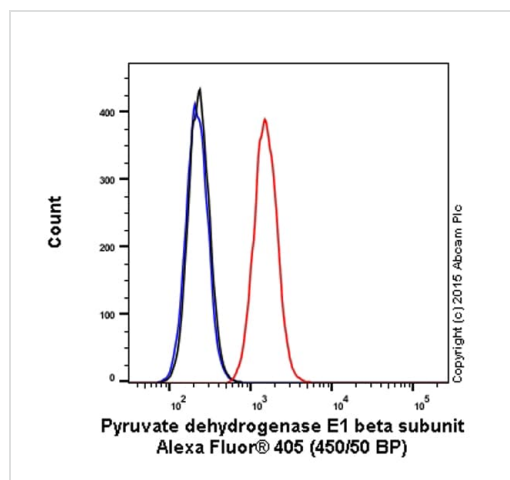
### Involvement in disease

Defects in PDHB are a cause of pyruvate dehydrogenase E1 component deficiency (PDHE1 deficiency) [MIM:312170]. PDHE1 deficiency is the most common enzyme defect in patients with primary lactic acidosis. It is associated with variable clinical phenotypes ranging from neonatal death to prolonged survival complicated by developmental delay, seizures, ataxia, apnea, and in some cases to an X-linked form of Leigh syndrome (LS) (Leigh encephalomyelopathy).

### Cellular localization

Mitochondrion matrix.

## Images



Flow Cytometry (Intracellular) - Alexa Fluor® 405  
Anti-PDHB antibody [EPR11097(B)] (ab210029)

Overlay histogram showing HeLa cells stained with ab210029 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min, blocked with Image-iT® FX Signal Enhancer for 30 min at 22°C and then blocked with 1x PBS / 10% normal goat serum for 1 hr at 22°C. Cells were then incubated with the antibody (ab210029, 1/50 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 405 ([ab208150](#)) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50mW violet laser (405nm) and 450/50 bandpass filter.

This antibody gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Alexa Fluor® 405 Anti-PDHB antibody  
[EPR11097(B)] (ab210029)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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