

## Product datasheet

# Anti-PHGDH/Malate dehydrogenase antibody ab57030

[6 References](#)   [5 Images](#)

### Overview

---

<b>Product name</b>	Anti-PHGDH/Malate dehydrogenase antibody
<b>Description</b>	Mouse monoclonal to PHGDH/Malate dehydrogenase
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IHC-P, Flow Cyt, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein corresponding to Human PHGDH/Malate dehydrogenase aa 1-534.
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 24/1/19. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>This product was previously labelled as PHGDH</p>

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

## Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.4
<b>Purity</b>	Tissue culture supernatant
<b>Purification notes</b>	Purified from TCS.
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab57030** 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 57 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

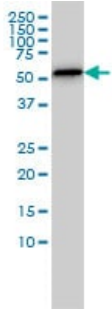
## Target

---

<b>Pathway</b>	Amino-acid biosynthesis; L-serine biosynthesis; L-serine from 3-phospho-D-glycerate: step 1/3.
<b>Involvement in disease</b>	Defects in PHGDH are the cause of phosphoglycerate dehydrogenase deficiency (PHGDH deficiency) [MIM:601815]. It is characterized by congenital microcephaly, psychomotor retardation, and seizures.
<b>Sequence similarities</b>	Belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family.

## Images

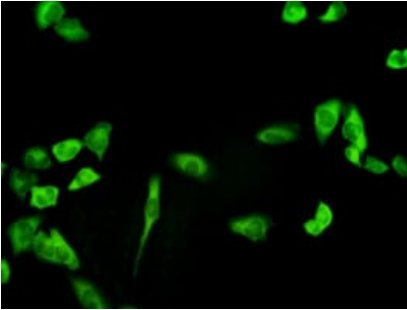
---



Western blot - Anti-PHGDH/Malate dehydrogenase antibody (ab57030)

PHGDH/Malate dehydrogenase antibody (ab57030) at 1  $\mu$ g/ml + Jurkat cell lysate at 25  $\mu$ g/lane.

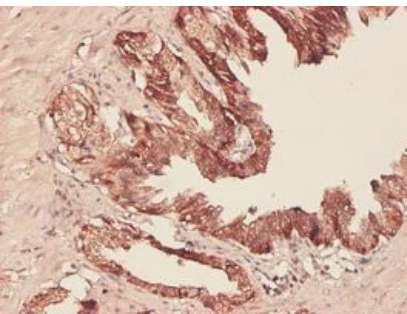
**This image was generated using the ascites version of the product.**



Immunocytochemistry/ Immunofluorescence - Anti-PHGDH/Malate dehydrogenase antibody (ab57030)

PHGDH/Malate dehydrogenase antibody (ab57030) used in immunofluorescence at 1-5  $\mu$ g/ml on HeLa cells.

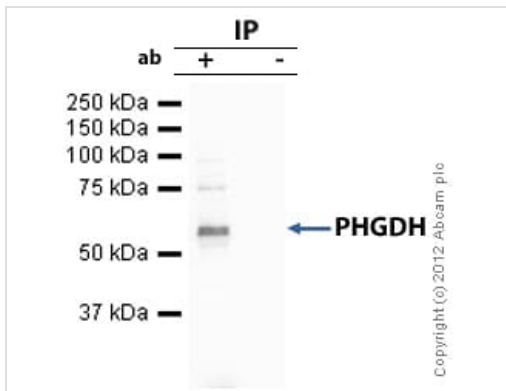
**This image was generated using the ascites version of the product.**



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHGDH/Malate dehydrogenase antibody (ab57030)

PHGDH/Malate dehydrogenase antibody (ab57030) used in immunohistochemistry at 5  $\mu$ g/ml on formalin fixed and paraffin embedded human lymph node.

**This image was generated using the ascites version of the product.**



Immunoprecipitation - Anti-PHGDH/Malate dehydrogenase antibody (ab57030)

PHGDH/Malate dehydrogenase was immunoprecipitated using 0.5mg Jurkat whole cell extract, 10µg of Mouse monoclonal to PHGDH/Malate dehydrogenase and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

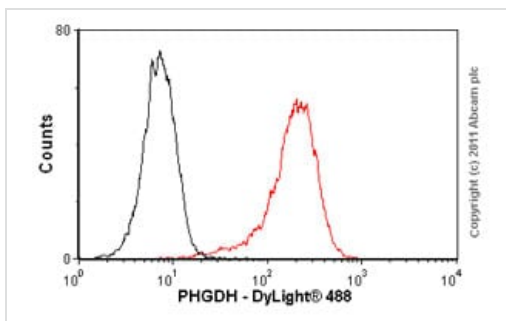
The antibody was incubated under agitation with Protein G beads for 10min, Jurkat whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab57030.

Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 57kDa; PHGDH/Malate dehydrogenase.

**This image was generated using the ascites version of the product.**



Flow Cytometry - Anti-PHGDH/Malate dehydrogenase antibody (ab57030)

Overlay histogram showing HeLa cells stained with ab57030 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab57030, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

**This image was generated using the ascites version of the product.**

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

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors