abcam

Product datasheet

Anti-PHGDH/Malate dehydrogenase antibody ab240744

2 References 4 Images

Overview

Product name	Anti-PHGDH/Malate dehydrogenase antibody
Description	Rabbit polyclonal to PHGDH/Malate dehydrogenase
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, IP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Cow, Pig, Chimpanzee, Orangutan
Immunogen	Synthetic peptide within Human PHGDH/Malate dehydrogenase aa 1-50. The exact sequence is proprietary. (NP_006614.2). Database link: **O43175**
Positive control	WB: HeLa, HEK-293T, Jurkat, TCMK-1 and NIH/3T3 whole cell lysate. IP: PHGDH/Malate dehydrogenase in HEK-293T whole cell lysate. IHC-P: Human breast carcinoma and mouse teratoma tissue.
General notes	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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate pH 7 to 8

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240744 in the following tested applications.

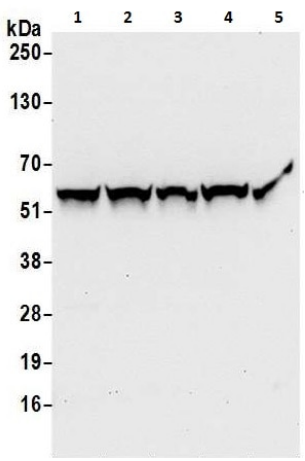
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/2000 - 1/10000.
IP		Use at 2-10 µg/mg of lysate.

Target

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

Images



Western blot - Anti-PHGDH/Malate dehydrogenase antibody (ab240744)

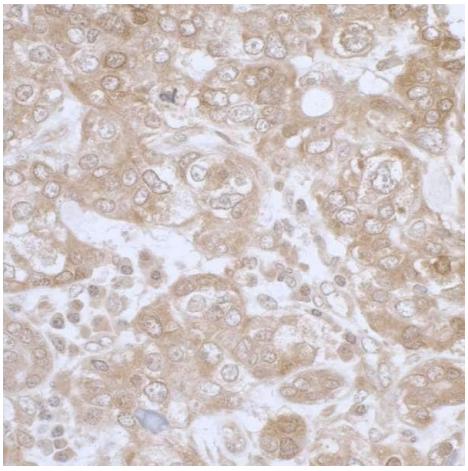
All lanes : Anti-PHGDH/Malate dehydrogenase antibody (ab240744) at 0.1 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 2 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 3 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate
Lane 4 : TCMK-1 (mouse kidney epithelial cell line) whole cell lysate
Lane 5 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lysates/proteins at 50 µg per lane.

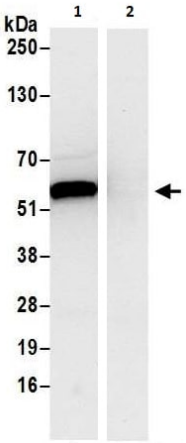
Exposure time: 10 seconds

Lysates prepared using NETN lysis buffer.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHGDH/Malate dehydrogenase antibody (ab240744)

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for PHGDH/Malate dehydrogenase using ab240744 at 1 µg/ml in immunohistochemical analysis. DAB staining.

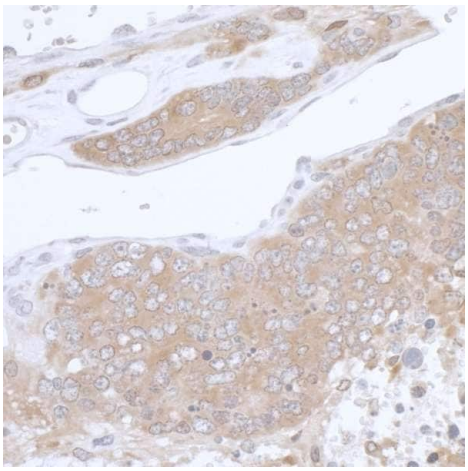


Immunoprecipitation - Anti-PHGDH/Malate dehydrogenase antibody (ab240744)

PHGDH/Malate dehydrogenase was immunoprecipitated from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab240744 at 6 µg/reaction. Western blot was performed from the immunoprecipitate using ab240744 at 0.4 µg/ml.

Lane 1: ab240744 IP in HEK-293T whole cell lysate.
Lane 2: Control IgG IP in HEK-293T whole cell lysate.

Detection: Chemiluminescence with exposure time of 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHGDH/Malate dehydrogenase antibody (ab240744)

Formalin-fixed, paraffin-embedded mouse teratoma tissue stained for PHGDH/Malate dehydrogenase using ab240744 at 1 µg/ml in immunohistochemical analysis. DAB staining.

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

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