# abcam

## Product datasheet

## Anti-Glucose 6 Phosphate Dehydrogenase antibody ab87230

★★★★★ 1 Abreviews 4 References 3 图像

概述

产品名称 Anti-Glucose 6 Phosphate Dehydrogenase抗体

描述 兔多克隆抗体to Glucose 6 Phosphate Dehydrogenase

**宿主** Rabbit

经测试应用 适用于: WB, IHC-P, ICC/IF

种属反应性 与反应: Mouse, Human

预测可用于: Rat, Sheep, Horse, Cow, Cat, Dog, Turkey, Zebrafish, Macaque monkey, Chinese

hamster 4

免疫原 Synthetic peptide corresponding to Human Glucose 6 Phosphate Dehydrogenase aa 450 to the

C-terminus (C terminal) conjugated to keyhole limpet haemocyanin.

(Peptide available as ab87368)

**阳性**对照 Recombinant human Glucose 6 Phosphate Dehydrogenase protein (<u>ab126671</u>) can be used as

a positive control in WB. This antibody gave a positive signal in RAW 264.7 and Jurkat Whole

Cell Lysates, and in Human Lymph node Tissue Lysate.

常规说明

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

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scientific support team who will be happy to help.

纯度 Immunogen affinity purified

克隆 多克隆 同种型 lgG

应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab87230于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	****(1)	Use a concentration of 1 µg/ml. Detects a band of approximately 59 kDa (predicted molecular weight: 59 kDa).
IHC-P		Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 µg/ml.

靶标

功能 Catalyzes the rate-limiting step of the oxidative pentose-phosphate pathway, which represents a

> route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid

synthesis.

组织特异性 Isoform Long is found in lymphoblasts, granulocytes and sperm.

通路 Carbohydrate degradation; pentose phosphate pathway; D-ribulose 5-phosphate from D-glucose

6-phosphate (oxidative stage): step 1/3.

疾病相关 Anemia, non-spherocytic hemolytic, due to G6PD deficiency

序列相似性 Belongs to the glucose-6-phosphate dehydrogenase family.

Acetylated by ELP3 at Lys-403; acetylation inhibits its homodimerization and enzyme activity. 翻译后修饰

Deacetylated by SIRT2 at Lys-403; deacetylation stimulates its enzyme activity.

图片



Western blot - Anti-Glucose 6 Phosphate Dehydrogenase antibody (ab87230) All lanes : Anti-Glucose 6 Phosphate Dehydrogenase antibody (ab87230) at 1  $\mu$ g/ml

**Lane 1 :** RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

Lane 2 : Human lymph node tissue lysate - total protein (<u>ab29871</u>)

Lane 3 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell

Lysate

Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

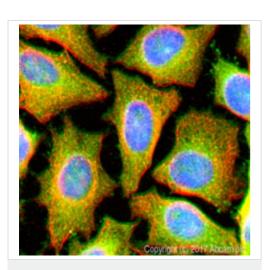
Performed under reducing conditions.

**Predicted band size:** 59 kDa **Observed band size:** 59 kDa

Additional bands at: 95 kDa. We are unsure as to the identity of

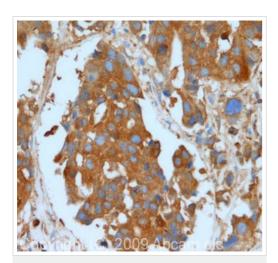
these extra bands.

Exposure time: 30 seconds



Immunocytochemistry/ Immunofluorescence - Anti-Glucose 6 Phosphate Dehydrogenase antibody (ab87230)

ab87230 stained in Hela cells. Cells were fixed with 4% paraformaldehyde (10min) at room temperature and incubated with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% triton for 1h at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab87230 at 1µg/ml and ab7291 (Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control) at 1/1000 dilution overnight at +4°C. The secondary antibodies were ab150120 (pseudo-colored red) and ab150081 (colored green) used at 1 ug/ml for 1hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43µM for 1hour at room temperature



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glucose 6 Phosphate
Dehydrogenase antibody (ab87230)

IHC image of Glucose 6 Phosphate Dehydrogenase staining in human breast carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab87230, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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

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