

**Catalog #: 65056** 

#### **Aliases**

PHGDH; Phosphoglycerate Dehydrogenase; D-3-Phosphoglycerate Dehydrogenase; SERA; GDH; PDG; 2-Oxoglutarate Reductase; Malate Dehydrogenase; EC 1.1.1.95; 3-PGDH; Epididymis Secretory Protein Li 113; 3-Phosphoglycerate Dehydrogenase; EC 1.1.1.399; EC 1.1.1.37; HEL-S-113; EC 1.1.1; PHGDHD; 3PGDH; PGDH3; NLS1; PGAD; NLS; PGD

# **Background**

Gene Name: PHGDH NCBI Gene Entry: 26227 UniProt Entry: O43175

# **Application Information**

Molecular Weight: Predicted, 57 kDa; observed, 57 kDa

Clonality: Mouse monoclonal antibody

Clone ID: 24GB14070

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC),

Immunohistochemistry (IHC)

#### Immunogen

Recombinant protein of human PHGDH

## **Isotype**

Mouse IgG2a

#### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

#### **Storage**

Store at -20 °C for one year.

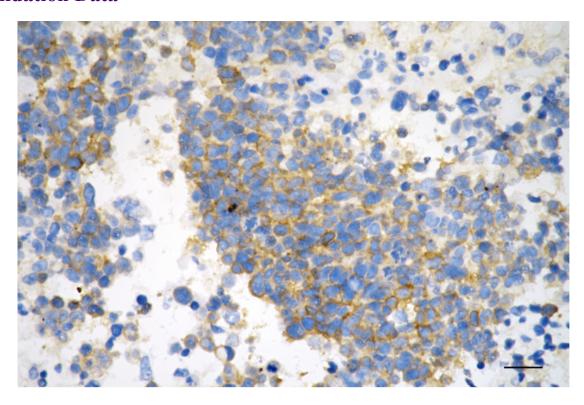
#### **Recommended Dilutions**

Western Blotting (WB): 1:500-1:2,500 Flow Cytometry (FCM): 1:2,000

Immunocytochemistry (IC): 1:100-1:1,000 Immunohistochemistry (IHC): 1:100-1:200

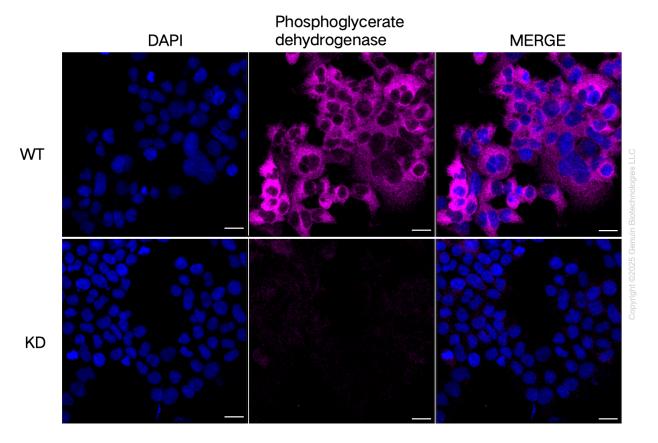
**Note:** This product is for research use only.

#### **Validation Data**



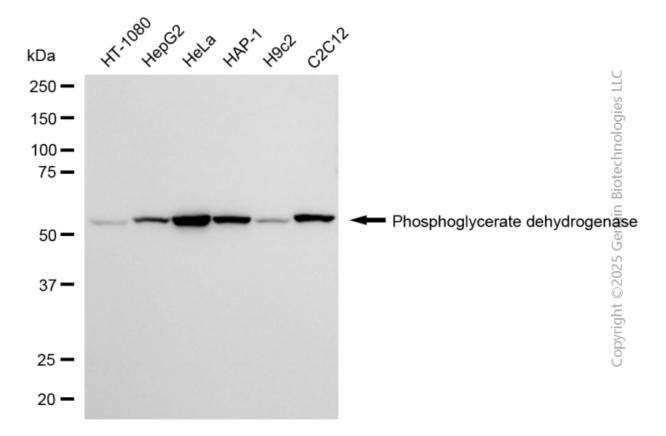
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Immunohistochemistry was performed on paraffin-embedded human glioblastoma using antiphosphoglycerate dehydrogenase antibody (Cat#65056, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.

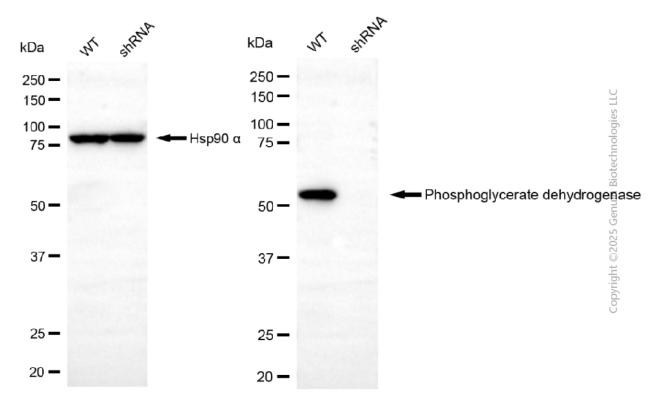


Immunocytochemical staining of HeLa cells using anti-Phosphoglycerate dehydrogenase antibody (Cat#65056, 1:1,000), Top panel: wild-type (WT); Bottom panal: Phosphoglycerate dehydrogenase shRNA knockdown (KD). Nuclei were stained blue with DAPI; Phosphoglycerate dehydrogenase was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.

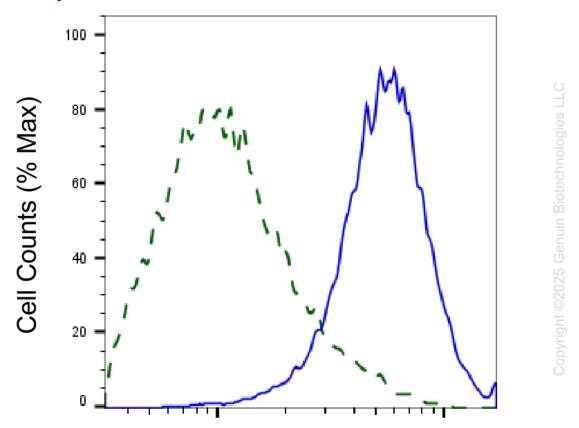
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Western blotting analysis using anti-phosphoglycerate dehydrogenase antibody (Cat#65056). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-phosphoglycerate dehydrogenase antibody (Cat#65056, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-phosphoglycerate dehydrogenase antibody (Cat#65056). Phosphoglycerate dehydrogenase expression in wild-type (WT) and phosphoglycerate dehydrogenase (PHGDH) shRNA knockdown (KD) HeLa cells with 20 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-phosphoglycerate dehydrogenase antibody (Cat#65056, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



# Phosphoglycerate dehydrogenase-Alexa Fluor® 647

Validation of Phosphoglycerate dehydrogenase knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-Phosphoglycerate dehydrogenase antibody (Cat#65056, 1:2,000) and analyzed using BD flow cytometer.