

**PHGDH Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2936a****Specification**

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**PHGDH Antibody (N-term) - Product Information**

Application	FC, WB, IHC-P,E
Primary Accession	<a href="#">O43175</a>
Other Accession	<a href="#">A5GFY8</a> , <a href="#">Q61753</a> , <a href="#">Q60HD7</a> , <a href="#">Q5EAD2</a>
Reactivity	Human, Mouse
Predicted	Bovine, Monkey, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56651
Antigen Region	140-168

**PHGDH Antibody (N-term) - Additional Information****Gene ID** 26227**Other Names**

D-3-phosphoglycerate dehydrogenase, 3-PGDH, PHGDH, PGDH3

**Target/Specificity**

This PHGDH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-168 amino acids from the N-terminal region of human PHGDH.

**Dilution**

FC~~1:10~50

WB~~1:1000

IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PHGDH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PHGDH Antibody (N-term) - Protein Information**

**Name** PHGDH

**Synonyms** PGDH3

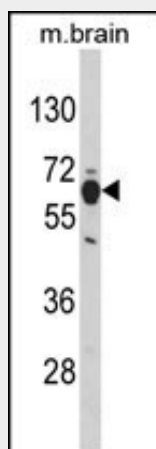
**Function** Catalyzes the reversible oxidation of 3-phospho-D-glycerate to 3-phosphonooxypyruvate, the first step of the phosphorylated L- serine biosynthesis pathway. Also catalyzes the reversible oxidation of 2-hydroxyglutarate to 2-oxoglutarate and the reversible oxidation of (S)-malate to oxaloacetate.

### PHGDH Antibody (N-term) - Protocols

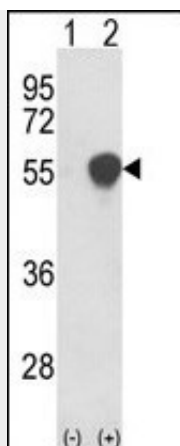
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

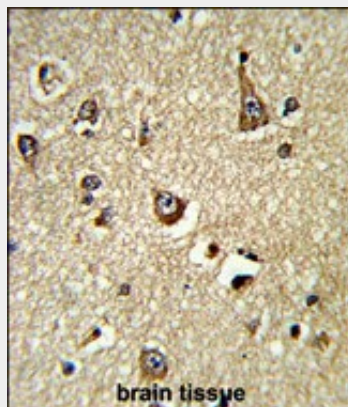
### PHGDH Antibody (N-term) - Images



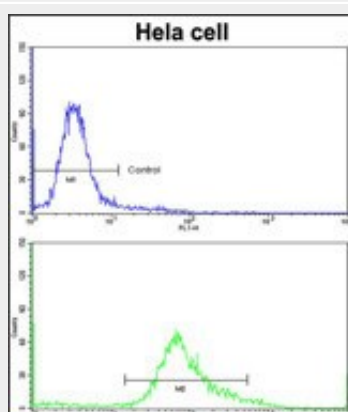
Western blot analysis of PHGDH Antibody (N-term) (Cat. #AP2936a) in mouse brain tissue lysates (35ug/lane). PHGDH (arrow) was detected using the purified Pab.



Western blot analysis of PHGDH (arrow) using rabbit polyclonal PHGDH Antibody (N-term) (Cat. #AP2936a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PHGDH gene (Lane 2) .



Formalin-fixed and paraffin-embedded human brain tissue reacted with PHGDH Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of hela cells using PHGDH Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### PHGDH Antibody (N-term) - Background

3-Phosphoglycerate dehydrogenase catalyzes the transition of 3-phosphoglycerate into

3-phosphohydroxypyruvate, which is the first and rate-limiting step in the phosphorylated pathway of serine biosynthesis, using NAD<sup>+</sup>/NADH as a cofactor.

#### **PHGDH Antibody (N-term) - References**

Klomp, L.W., et.al., Am. J. Hum. Genet. 67 (6), 1389-1399 (2000)