

### Datasheet for ABIN872981

# anti-PHGDH antibody (AA 101-200)



#### Overview

Alternative Name:

Quantity:	100 μL
Target:	PHGDH
Binding Specificity:	AA 101-200
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PHGDH antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))
Product Details	
Immunogen:	KLH conjugated synthetic peptide derived from human PHGDH
Isotype:	IgG
Predicted Reactivity:	Human,Mouse,Rat,Dog,Cow,Sheep,Pig,Horse,Rabbit
Purification:	Purified by Protein A.
Target Details	
Target:	PHGDH

PHGDH (PHGDH Products)

#### Target Details

Background:

Synonyms: NLS, PDG, PGD, NLS1, PGAD, PGDH, SERA, 3PGDH, 3-PGDH, PHGDHD, HEL-S-113,

D-3-phosphoglycerate dehydrogenase, PHGDH, PGDH3

Background: The survival and development of central neurons require the supply of trophic factors by glial cells. The trophic actions of glial cells on Purkinje neurons are mediated by L-serine and glycine, which are glia-derived trophic factors synthesized by 3PGDH (1). 3PGDH protein is 544 amino acids in length. Two distinct mRNA transcripts that encode for 3PGDH protein in normal human tissues are dominant 2.1 kb mRNA, which is highly expressed in prostate, testis, ovary, brain, liver, kidney, and pancreas, and weakly expressed in thymus, colon, and heart, and 710 bp mRNA, which is highly expressed in heart and skeletal muscle (2). 3PGDH is regulated at the transcriptional level depending on tissue specificity and cellular proliferative status (2). 3PGDH protein is also highly expressed in adult and fetal brain tissues (3). 3PGDH protein plays an important role in the metabolism, development, and function of the central nervous system (3) and its deficiency is a treatable congential error (4-5) that impairs L-serine biosynthesis which is characterized by congenital microcephaly, psychomotor

Gene ID:

26227

UniProt:

043175

retardation, and seizures (3).

Pathways:

Metabolism of Steroid Hormones and Vitamin D, Warburg Effect

#### **Application Details**

**Application Notes:** 

WB 1:300-5000

ELISA 1:500-1000

IHC-P 1:200-400

IHC-F 1:100-500

IF(IHC-P) 1:50-200

IF(IHC-F) 1:50-200

IF(ICC) 1:50-200

Restrictions:

For Research Use only

#### Handling

Format:

Liquid

Concentration:

 $1 \mu g/\mu L$ 

Buffer:

0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

## Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months