

For Research Use Only

PHGDH Polyclonal antibody

Catalog Number: 14719-1-AP

Featured Product

46 Publications



Basic Information

Catalog Number:

14719-1-AP

Size:

300 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG6445

GenBank Accession Number:

BC000303

GeneID (NCBI):

26227

UNIPROT ID:

O43175

Full Name:

phosphoglycerate dehydrogenase

Calculated MW:

57 kDa

Observed MW:

57 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF 1:50-1:500

Applications

Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

WB, IF, IHC, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HEK-293T cells, mouse brain tissue, rat brain tissue, HeLa cells, HepG2 cells, MCF-7 cells, MDA-MB-453s cells

IP: HeLa cells,

IHC: human lymphoma tissue, human breast hyperplasia tissue, mouse brain tissue

IF: HeLa cells,

Background Information

PHGDH(D-3-phosphoglycerate dehydrogenase) is also named as 3-PGDH, PGDH3 and belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family. It 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⁺/NADH as a cofactor. 3-PGDH deficiency is a rare recessive inborn error in the biosynthesis of the amino acid L-serine characterized clinically by congenital microcephaly, psychomotor retardation, and intractable seizures(PMID:19235232).

Notable Publications

Author	Pubmed ID	Journal	Application
Shengya Tian	31562192	Life Sci Alliance	WB
Ji Wang	34544857	Proc Natl Acad Sci U S A	WB
R L Yang	32940141	J Dent Res	WB,IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

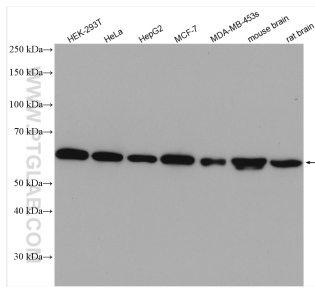
T: 4006900926

E: Proteintech-CN@ptglab.com

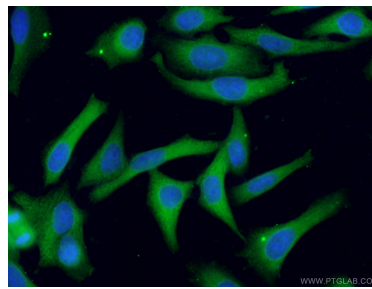
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

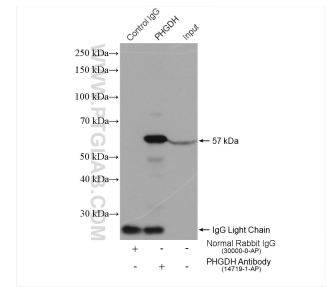
Selected Validation Data



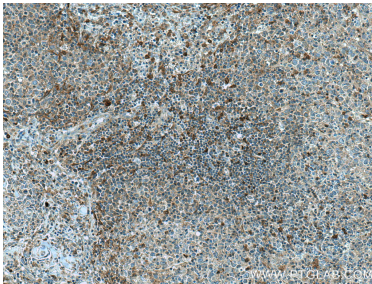
Various lysates were subjected to SDS PAGE followed by western blot with 14719-1-AP (PHGDH antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



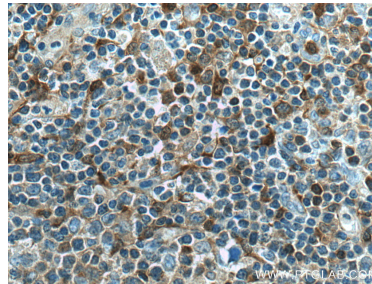
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 14719-1-AP (PHGDH antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-PHGDH (IP:14719-1-AP, 4ug; Detection:14719-1-AP 1:10000) with HeLa cells lysate 1880 ug.



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 14719-1-AP (PHGDH antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 14719-1-AP (PHGDH antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).