For Research Use Only

PHGDH Monoclonal antibody

Catalog Number:67591-1-Ig 2 Publications

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Basic Information

Catalog Number:
67591-1-Ig

Size:
150ul , Concentration: 1100 ug/ml by Nanodrop and 500 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG6877

GenBank Accession Number:
BC000303

GeneID (NCBI):
26227

UNIPROT ID:
O43175

Full Name:
phosphoglycerate dehydrogenase

Calculated MW:
57 kDa

Observed MW:
57 kDa

Purification Method:
Protein G purification

CloneNo.:
1E8B8

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:2000-1:8000
IF/ICC 1:400-1:1600

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, 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 : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

IP : HeLa cells,

IHC : human urothelial carcinoma tissue,

IF/ICC : 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
Youming Zhu	35081364	Mol Cell	WB
Xinhui Lu	38159553	Int Immunopharmacol	WB

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

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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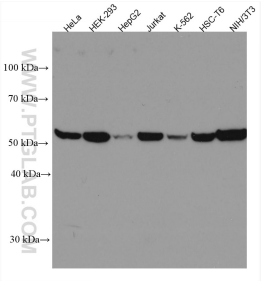
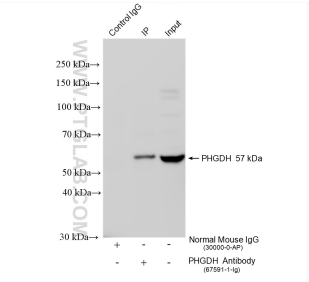
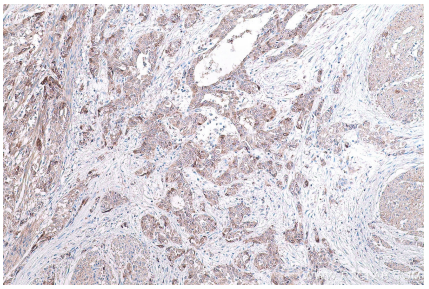
Selected Validation Data



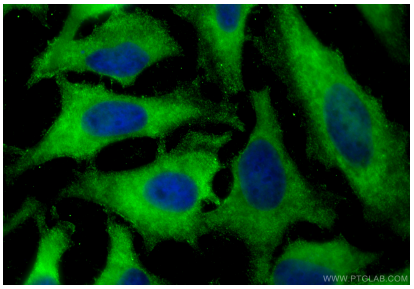
Various lysates were subjected to SDS PAGE followed by western blot with 67591-1-Ig (PHGDH antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-PHGDH (IP:67591-1-Ig, 4ug; Detection:67591-1-Ig 1:3000) with HeLa cells lysate 980 ug.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 67591-1-Ig (PHGDH antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PHGDH antibody (67591-1-Ig, Clone: 1E8B8) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).