

For Research Use Only

PGD Polyclonal antibody

Catalog Number: 14718-1-AP

Featured Product

17 Publications



Basic Information

Catalog Number:

14718-1-AP

Size:

150ul, Concentration: 400 µg/ml by Nanodrop and 247 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG6444

GenBank Accession Number:

BC000368

GeneID (NCBI):

5226

UNIPROT ID:

P52209

Full Name:

phosphogluconate dehydrogenase

Calculated MW:

53 kDa

Observed MW:

53 kDa, 45 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

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

IHC 1:300-1:1200

IF 1:10-1:100

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

Positive Controls:

WB: HeLa cells, HepG2 cells, Jurkat cells, mouse liver tissue, rat liver tissue

IP: HepG2 cells,

IHC: human liver cancer tissue, human lymphoma tissue

IF: HepG2 cells,

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

Background Information

PGD, also named as PGDH, belongs to the 6-phosphogluconate dehydrogenase family. PGD catalyses the oxidative decarboxylation of 6-phosphogluconate to ribulose 5-phosphate in the context of the oxidative part of the pentose phosphate pathway. PGD is important for the production of NADPH, which is necessary for reductive biosynthesis, such as the formation of lipids and nucleotides, and the activity of enzymes involved in maintaining cell integrity, in combatting oxidative stress and in the first line of immunological defence. (PMID: 35234135)

Notable Publications

Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Hao Sheng	31504235	Carcinogenesis	WB,IHC
Xiaoyu Ma	29138396	Nat Commun	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

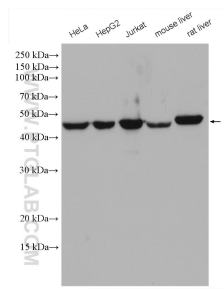
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

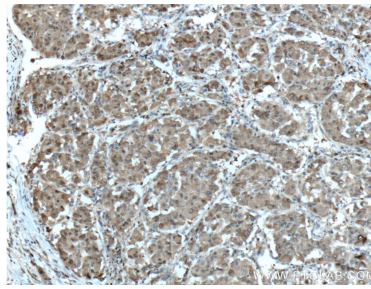
E: proteintech@ptglab.com
W: ptglab.com

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

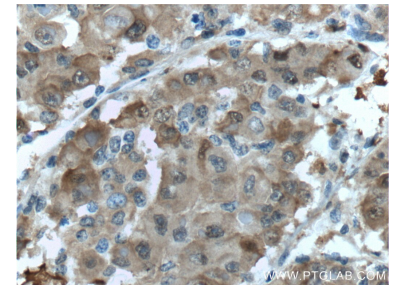
Selected Validation Data



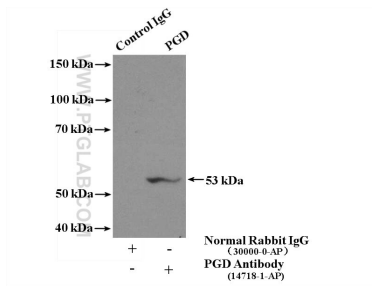
Various lysates were subjected to SDS PAGE followed by western blot with 14718-1-AP (PGD antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



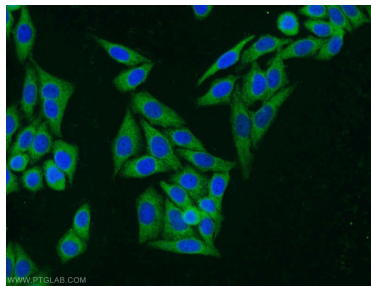
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14718-1-AP (PGD Antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14718-1-AP (PGD Antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PGD (IP:14718-1-AP, 4ug; Detection:14718-1-AP 1:500) with HepG2 cells lysate 3200ug.



Immunofluorescent analysis of HepG2 cells using 14718-1-AP (PGD antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).