

For Research Use Only

Pyruvate Carboxylase Polyclonal antibody

Catalog Number: 16588-1-AP

Featured Product

43 Publications



Basic Information

Catalog Number:

16588-1-AP

Concentration:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG8857

GenBank Accession Number:

BC011617

GeneID (NCBI):

5091

UNIPROT ID:

P11498

Full Name:

pyruvate carboxylase

Calculated MW:

1178 aa, 130 kDa

Observed MW:

125-130 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:500-1:2000

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, bovine

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 : mouse liver tissue, HepG2 cells, rat liver tissue

IP : HepG2 cells, mouse liver tissue

IHC : human liver cancer tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

Background Information

PC(pyruvate carboxylase) is a member of the family of biotin-dependent carboxylases and is found widely among eukaryotic tissues and in many prokaryotic species. It catalyses the ATP-dependent carboxylation of pyruvate to form oxaloacetate which may be utilised in the synthesis of glucose, fat, some amino acids or their derivatives and several neurotransmitters. Diabetes and hyperthyroidism increase the level of expression of pyruvate carboxylase in the long term, while its activity in the short term is controlled by the intramitochondrial concentrations of acetyl-CoA and pyruvate(PMID:9597748).

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------------|-----------|--------------|-------------|
| Teresa W-M Fan | 36150727 | J Immunol | |
| Jasmin Sponagel | 36108629 | Med (N Y) | WB |
| Letian Zhang | 34481473 | BMC Genomics | IHC |

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

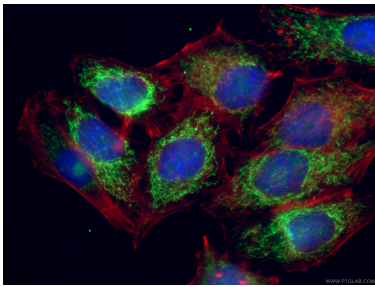
T: 4006900926

E: Proteintech-CN@ptglab.com

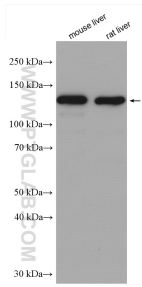
W: ptgcn.com

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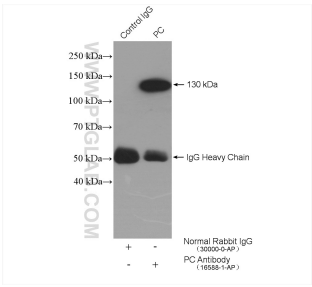
Selected Validation Data



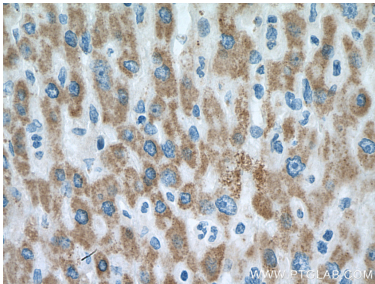
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 16588-1-AP (Pyruvate Carboxylase antibody), at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L). F-actin is stained using CL555-phalloidin (red) and DNA is stained by DAPI (blue).



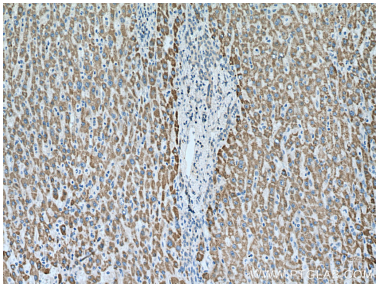
Various lysates were subjected to SDS PAGE followed by western blot with 16588-1-AP (Pyruvate Carboxylase antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



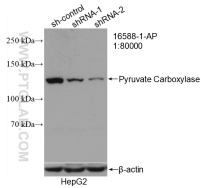
IP result of anti-Pyruvate Carboxylase (IP:16588-1-AP, 4ug; Detection:16588-1-AP 1:1000) with HepG2 cells lysate 2640 ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16588-1-AP (Pyruvate Carboxylase antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16588-1-AP (Pyruvate Carboxylase antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of Pyruvate Carboxylase antibody (16588-1-AP; 1:80000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Pyruvate Carboxylase transfected HepG2 cells.