For Research Use Only

PHKB Polyclonal antibody

Catalog Number:13400-1-AP Featured Product 4 Publications

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Basic Information

Catalog Number:
13400-1-AP

Size:
450 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4240

GenBank Accession Number:
BC033657

GeneID (NCBI):
5257

UNIPROT ID:
Q93100

Full Name:
phosphorylase kinase, beta

Calculated MW:
1086 aa, 124 kDa

Observed MW:
124 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
IHC, IP, WB, ELISA

Cited Applications:
WB, IHC, IP

Species Specificity:
human, mouse

Cited Species:
human, mouse, pig

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 : HepG2 cells, Jurkat cells, K-562 cells, LNCaP cells, mouse heart tissue, rat heart tissue, rat skeletal muscle tissue, mouse skeletal muscle tissue

IP : mouse heart tissue,

IHC : mouse liver tissue, human skeletal muscle tissue, human liver tissue, mouse skeletal muscle tissue

Background Information

PHKB gene encodes phosphorylase kinase subunit beta involved in glycan biosynthesis and glycogen metabolism. PHKB activity is regulated by phosphorylation of various serine residues, and catalyzes the phosphorylation of serine in certain substrates, including troponin I. Phosphorylase kinase (PhK) complex, composed of alpha, beta, gamma, and delta subunits, stimulates energy production from glycogen in the cascade activation of glycogenolysis. Its large homologous alpha and beta subunits regulate the activity of the catalytic gamma subunit. Defects in PHKB are the cause of glycogen storage disease type 9B (GSD9B) also known as phosphorylase kinase deficiency of liver and muscle (PKD), characterized by hepathomegaly, only slightly elevated transaminases and plasma lipids, clinical improvement with increasing age, and remarkably no clinical muscle involvement.

Notable Publications

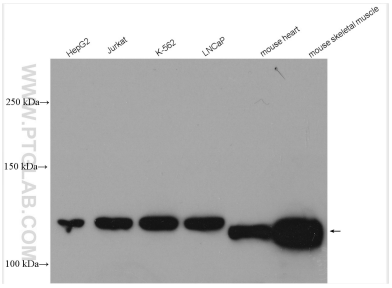
Author	Pubmed ID	Journal	Application
Guanghui Wang	28275865	J Cancer Res Clin Oncol	WB,IHC
Motoyasu Hosokawa	30870781	iScience	WB
Haigang Cao	38823637	J Biol Chem	WB

Storage

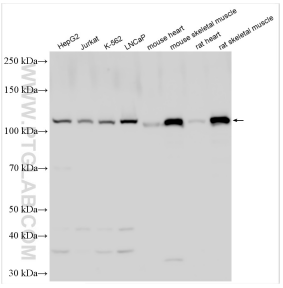
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

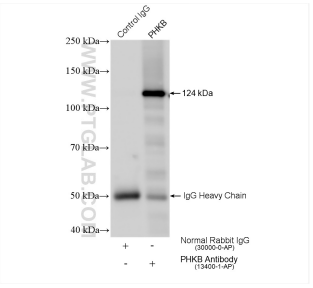
Selected Validation Data



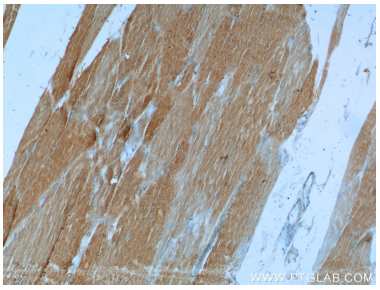
HepG2 cells were subjected to SDS PAGE followed by western blot with 13400-1-AP (PHKB antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



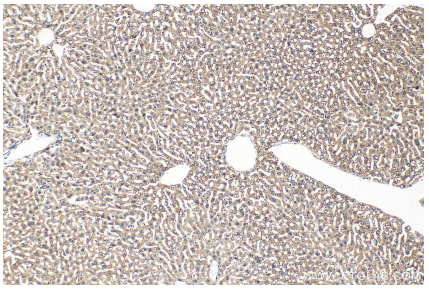
Various lysates were subjected to SDS PAGE followed by western blot with 13400-1-AP (PHKB antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



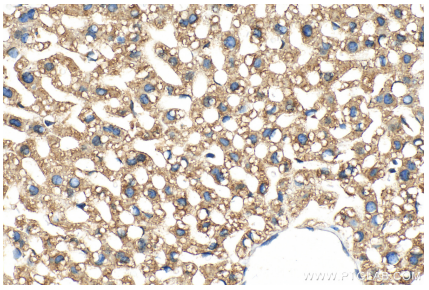
IP result of anti-PHKB (IP:13400-1-AP, 4ug; Detection:13400-1-AP 1:500) with mouse heart tissue lysate 1680 ug.



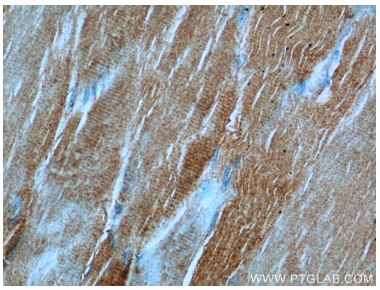
Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 13400-1-AP (PHKB Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 13400-1-AP (PHKB antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 13400-1-AP (PHKB antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 13400-1-AP (PHKB Antibody) at dilution of 1:50 (under 40x lens).