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PKLR Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7043a

Product Information

Application	WB, IHC-P, E
Primary Accession	P30613
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB03692
Calculated MW	61830
Antigen Region	1-30

Additional Information

Gene ID	5313
Other Names	Pyruvate kinase PKLR, Pyruvate kinase 1, Pyruvate kinase isozymes L/R, R-type/L-type pyruvate kinase, Red cell/liver pyruvate kinase, PKLR, PK1, PKL
Target/Specificity	This PKLR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PKLR.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PKLR Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PKLR
Synonyms	PK1, PKL
Function	Pyruvate kinase that catalyzes the conversion of phosphoenolpyruvate to pyruvate with the synthesis of ATP, and which plays a key role in glycolysis

(PubMed:11960989). Also produces the side product 2-phospholactate which can inhibit fructose-2,6- bisphosphate production (PubMed:27294321). 2-phospholactate can be dephosphorylated by PGP which prevents the inhibition of fructose-2,6- bisphosphate production and allows glycolysis to occur (PubMed:27294321).

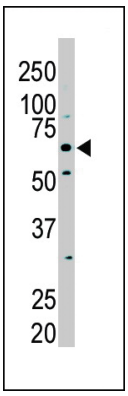
Background

PKLR is a pyruvate kinase that catalyzes the production of phosphoenolpyruvate from pyruvate and ATP. Defects in this enzyme, due to gene mutations or genetic variations, are the common cause of chronic hereditary nonspherocytic hemolytic anemia (CNSHA or HNSHA).

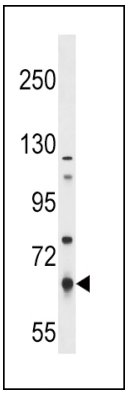
References

Wang, H., et al., Diabetes 51(9):2861-2865 (2002). Valentini, G., et al., J. Biol. Chem. 277(26):23807-23814 (2002). Mateu, E., et al., Hum. Genet. 110(6):532-544 (2002). Indo, Y., et al., Hum. Mutat. 18(4):308-318 (2001). Acan, N.L., et al., J. Enzym. Inhib. 16(5):457-464 (2001).

Images

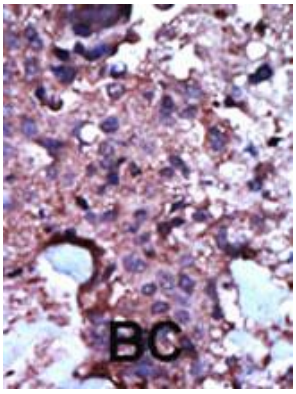


The anti-PKLR Pab (Cat. #AP7043a) is used in Western blot to detect PKLR in NIH/3T3 cell lysate.



PKLR Antibody (S8) (Cat. #AP7043a) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the PKLR antibody detected the PKLR protein (arrow).

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



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