

For Research Use Only

PAICS Polyclonal antibody

Catalog Number: 12967-1-AP

Featured Product

5 Publications



Basic Information

Catalog Number: 12967-1-AP	GenBank Accession Number: BC010273	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 550 µg/ml by Nanodrop;	GeneID (NCBI): 10606	Recommended Dilutions: WB 1:1000-1:8000 IHC 1:50-1:500
Source: Rabbit	Full Name: phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase	
Isotype: IgG	Calculated MW: 425 aa, 47 kDa	
Immunogen Catalog Number: AG3621	Observed MW: 47 kDa	

Applications

Tested Applications:

FC, IHC, WB, ELISA

Cited Applications:

CoIP, IF, WB

Species Specificity:

human, mouse

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: HL-60 cells, mouse heart tissue, HeLa cells, Jurkat cells, K-562 cells, Raji cells, THP-1 cells, mouse brain tissue

IHC: human liver tissue, human testis tissue

Background Information

PAICS is also named as ADE2 (Multifunctional protein), AIRC, PAIS. It is an important bifunctional enzyme in de novo purine biosynthesis in vertebrate with both 5-aminoimidazole ribonucleotide carboxylase (AIRC) and 4-(N-succinylcarboxamide)-5-aminoimidazole ribonucleotide synthetase (SAICARs) activities. It becomes an attractive target for rational anticancer drug design, since rapidly dividing cancer cells rely heavily on the purine de novo pathway for synthesis of adenine and guanine, whereas normal cells favor the salvage pathway (PMID:17224163).

Notable Publications

Author	Pubmed ID	Journal	Application
Eunus S Ali	32485148	Mol Cell	WB
Minjun Meng	30097015	Biol Res	WB
Seiya Yamada	32344379	iScience	IF, CoIP

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

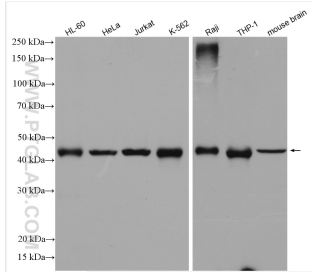
For technical support and original validation data for this product please contact:

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

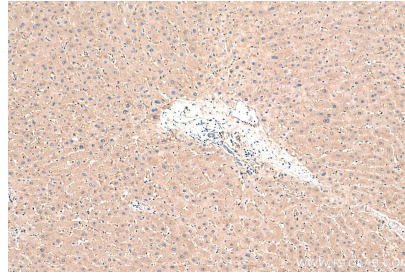
E: proteintech@ptglab.com
W: ptglab.com

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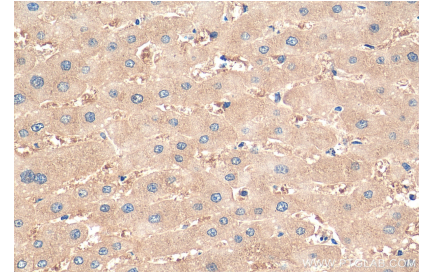
Selected Validation Data



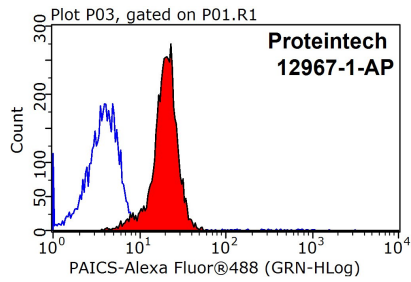
Various lysates were subjected to SDS PAGE followed by western blot with 12967-1-AP (PAICS antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 12967-1-AP (PAICS 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 human liver tissue slide using 12967-1-AP (PAICS antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1×10^6 HeLa cells were stained with 0.2ug PAICS antibody (12967-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.