

For Research Use Only

# PAICS Polyclonal antibody

Catalog Number: 12967-1-AP

Featured Product

5 Publications



## Basic Information

**Catalog Number:**

12967-1-AP

**Size:**

550 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3621

**GenBank Accession Number:**

BC010273

**GeneID (NCBI):**

10606

**UNIPROT ID:**

P22234

**Full Name:**

phosphoribosylaminoimidazole  
carboxylase,  
phosphoribosylaminoimidazole  
succinocarboxamide synthetase

**Calculated MW:**

425 aa, 47 kDa

**Observed MW:**

47 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:8000

IHC 1:50-1:500

## Applications

**Tested Applications:**

FC, IHC, WB, ELISA

**Cited Applications:**

WB, IF, CoIP

**Species Specificity:**

human, mouse

**Cited Species:**

human, mouse

**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

**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

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

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

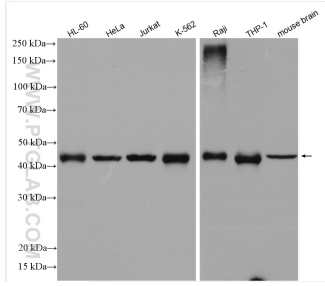
T: 4006900926

E: Proteintech-CN@ptglab.com

W: ptgcn.com

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

## Selected Validation Data



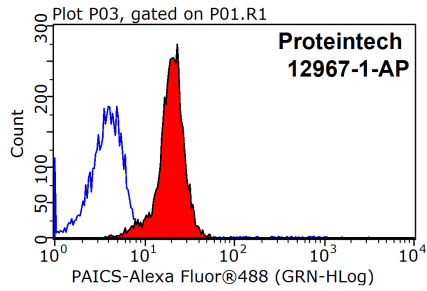
Various lysates were subjected to SDS PAGE followed by western blot with 12967-1-AP (PAICS antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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).



1X10<sup>6</sup> 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.