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PAICS Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12945a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P22234
Other Accession	P38024, NP_001072992.1, NP_006443.1
Reactivity	Human, Mouse
Predicted	Chicken, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31339
Calculated MW	47079
Antigen Region	95-123

Additional Information

Gene ID	10606
Other Names	Multifunctional protein ADE2, Phosphoribosylaminoimidazole-succinocarboxamide synthase, SAICAR synthetase, Phosphoribosylaminoimidazole carboxylase, AIR carboxylase, AIRC, PAICS, ADE2, AIRC, PAIS
Target/Specificity	This PAICS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-123 amino acids from the N-terminal region of human PAICS.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	PAICS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PAICS (HGNC:8587)

Function	Bifunctional phosphoribosylaminoimidazole carboxylase and phosphoribosylaminoimidazole succinocarboxamide synthetase catalyzing two reactions of the de novo purine biosynthetic pathway.

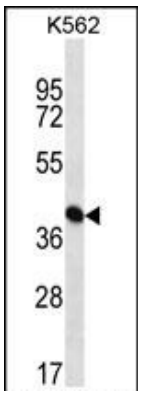
Background

This gene encodes a bifunctional enzyme containing phosphoribosylaminoimidazole carboxylase activity in its N-terminal region and phosphoribosylaminoimidazole succinocarboxamide synthetase in its C-terminal region. It catalyzes steps 6 and 7 of purine biosynthesis. The gene is closely linked and divergently transcribed with a locus that encodes an enzyme in the same pathway, and transcription of the two genes is coordinately regulated. The human genome contains several pseudogenes of this gene. Multiple transcript variants encoding different isoforms have been found for this gene.

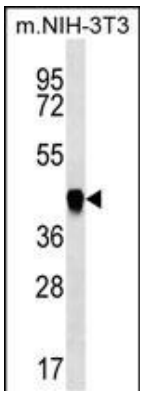
References

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Ikeda, M., et al. Biol. Psychiatry 67(3):263-269(2010)
Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images

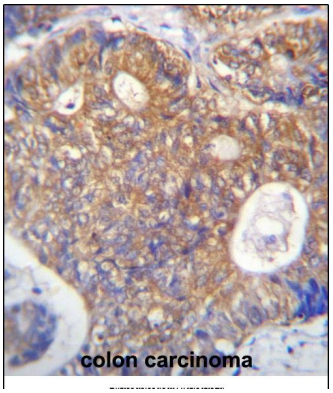


PAICS Antibody (N-term) (Cat. #AP12945a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the PAICS antibody detected the PAICS protein (arrow).

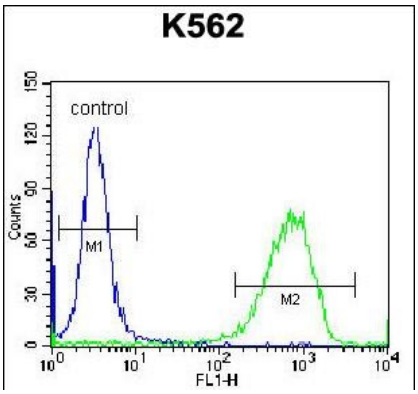


PAICS Antibody (N-term) (Cat. #AP12945a) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the PAICS antibody detected the PAICS protein (arrow).

PAICS Antibody (N-term) (Cat. #AP12945a)immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PAICS Antibody (N-term) for immunohistochemistry. Clinical relevance has not been



evaluated.



PAICS Antibody (N-term) (Cat. #AP12945a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.