

## Product datasheet for **CF501470**

### PAICS Mouse Monoclonal Antibody [Clone ID: OT11B4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OT11B4
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PAICS (NP_006443) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	46.9 kDa
Gene Name:	phosphoribosylaminoimidazole carboxylase and phosphoribosylaminoimidazolesuccinocarboxamide synthase
Database Link:	<a href="#">NP_006443</a> <a href="#">Entrez Gene 67054 Mouse</a> <a href="#">Entrez Gene 140946 Rat</a> <a href="#">Entrez Gene 10606 Human</a> <a href="#">P22234</a>



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**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. [provided by RefSeq]

**Synonyms:**

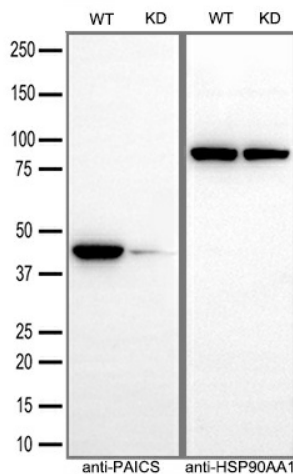
ADE2; ADE2H1; AIRC; PAIS

**Protein Families:**

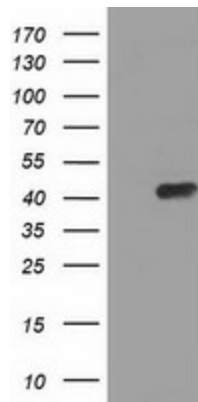
Druggable Genome

**Protein Pathways:**

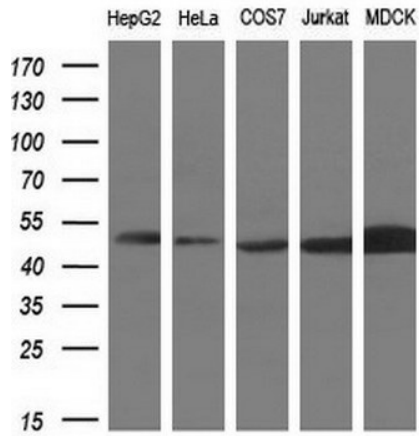
Metabolic pathways, Purine metabolism

**Product images:**


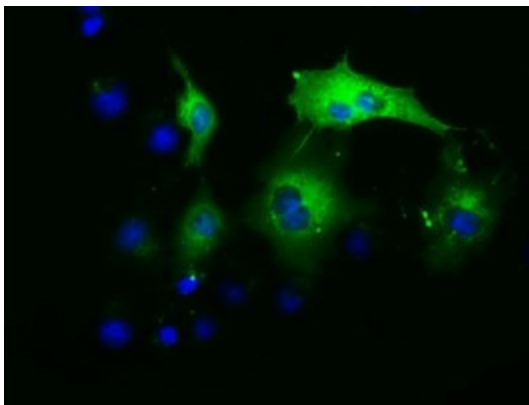
Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells (WT) and PAICS-Knockdown HeLa cells (KD) were separated by SDS-PAGE and immunoblotted with anti-PAICS monoclonal antibody [TA501470] (1:2500). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.



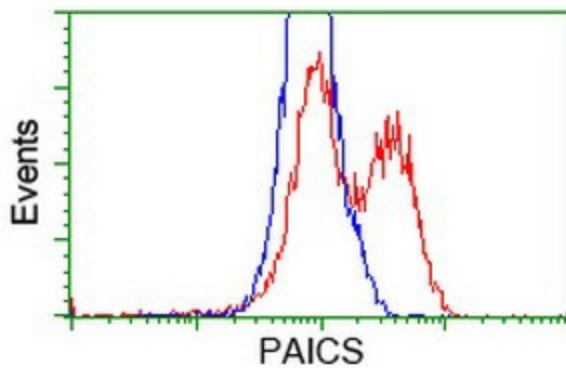
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PAICS (Cat# [RC215225], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PAICS (Cat# [TA501470]). Positive lysates [LY416636] (100ug) and [LC416636] (20ug) can be purchased separately from OriGene.



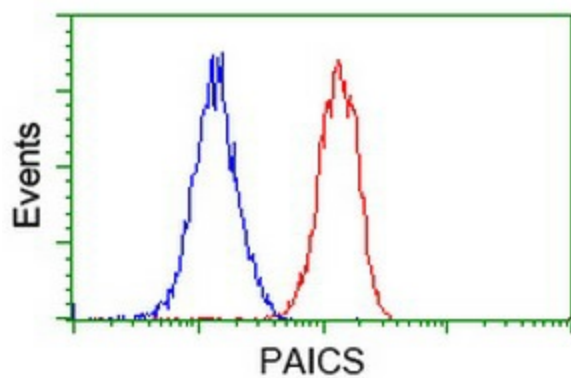
Western blot analysis of extracts (10ug) from 5 different cell lines by using anti-PAICS monoclonal antibody at 1:200 dilution.



Anti-PAICS mouse monoclonal antibody ([TA501470]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PAICS ([RC215225]).



HEK293T cells transfected with either [RC215225] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PAICS antibody ([TA501470]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-PAICS antibody ([TA501470]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).