

Product Name: KD-Validated PAICS Mouse Monoclonal Antibody

Catalog #: KVA00523

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 47.1kDa

Antigen Information

Gene Name	PAICS
Alternative Names	PAICS; Phosphoribosylaminoimidazole Carboxylase And Phosphoribosylaminoimidazolesuccinocarboxamide Synthase; ADE2H1; PAIS; Bifunctional Phosphoribosylaminoimidazole Carboxylase/Phosphoribosylaminoimidazole Succinocarboxamide Synthetase; Phosphoribosylaminoimidazole Carboxylase, Phosphoribosylaminoimidazole Succinocarboxamide Synthetase; ADE2; Phosphoribosylaminoimidazole Carboxylase; Phosphoribosylaminoimidazolesuccinocarboxamide Synthase; Multifunctional Protein ADE2H1; Multifunctional Protein ADE2; SAICAR Synthetase; AIR Carboxylase; PAICSD
Gene ID	10606.0
SwissProt ID	P22234

Immunogen

Recombinant protein of human PAICS

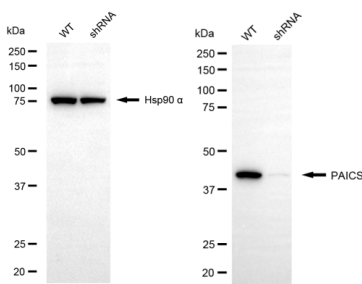
Background

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, Jul 2008]

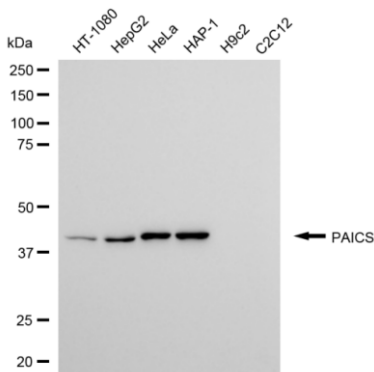
Research Area

Cell Biology

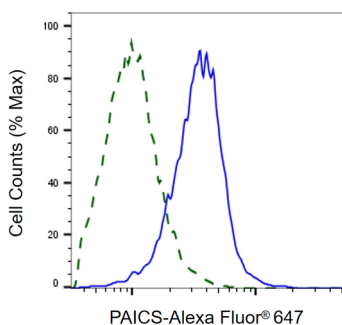
Image Data



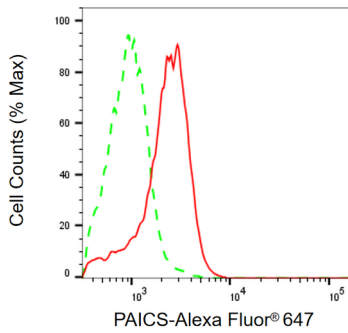
Western blotting analysis using PAICS antibody (KVA00523). PAICS expression in wild-type (WT) and PAICS shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PAICS antibody (KVA00523, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using PAICS antibody (KVA00523). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PAICS antibody (KVA00523, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Validation of PAICS knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with PAICS antibody (KVA00523, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PAICS expression in HAP-1 cells using PAICS antibody (KVA00523, 1:2,000). Green, isotype control; red, PAICS.