

Product Name: KD-Validated ATIC Mouse Monoclonal Antibody**Catalog #: KVA00614**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 64.6kDa

Antigen Information

Gene Name	ATIC
Alternative Names	ATIC; 5-Aminoimidazole-4-Carboxamide Ribonucleotide Formyltransferase/IMP Cyclohydrolase; PURH; IMPCHASE; AICARFT; Phosphoribosylaminoimidazolecarboxamide Formyltransferase/IMP Cyclohydrolase; AICAR Transformylase/Inosine Monophosphate Cyclohydrolase; Bifunctional Purine Biosynthesis Protein ATIC; 5-Aminoimidazole-4-Carboxamide-1-Beta-D-Ribonucleotide Transformylase/Inosinase; AICAR Formyltransferase/IMP Cyclohydrolase Bifunctional Enzyme; Epididymis Secretory Sperm Binding Protein Li 70p; Bifunctional Purine Biosynthesis Protein PURH; AICARFT/IMPCHASE; HEL-S-70p; AICAR
Gene ID	471.0
SwissProt ID	P31939

Immunogen

Recombinant protein of human ATIC

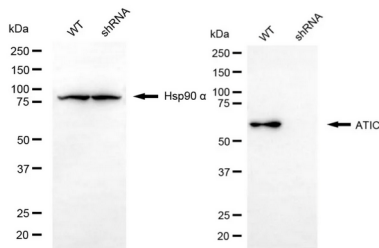
Background

This gene encodes a bifunctional protein that catalyzes the last two steps of the de novo purine biosynthetic pathway. The N-terminal domain has phosphoribosylaminoimidazolecarboxamide formyltransferase activity, and the C-terminal domain has IMP cyclohydrolase activity. A mutation in this gene results in AICA-ribosiduria. [provided by RefSeq, Sep 2009]

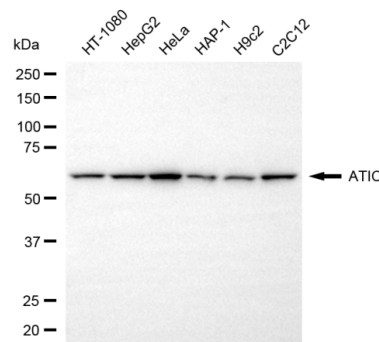
Research Area

Epigenetics and Nuclear Signaling,Signal Transduction,Metabolism

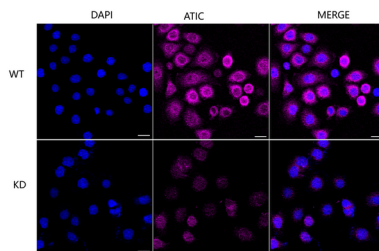
Image Data



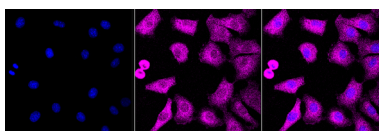
Western blotting analysis using ATIC antibody (KVA00614). ATIC expression in wild-type (WT) and ATIC shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATIC antibody (KVA00614, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



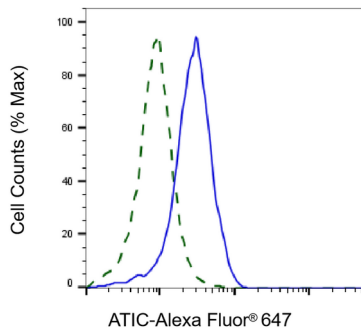
Western blotting analysis using ATIC antibody (KVA00614). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATIC antibody (KVA00614, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



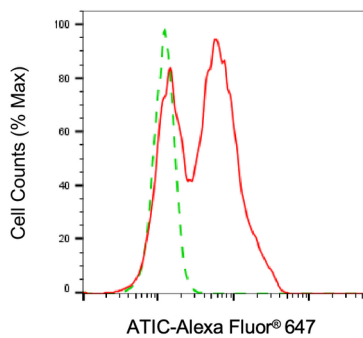
Immunocytochemical staining of HeLa cells using ATIC antibody (KVA00614, 1:1,000). Top panel: wild-type (WT); Bottom panel: ATIC shRNA knockdown (KD). Nuclei were stained blue with DAPI; ATIC was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of C2C12 cells with ATIC associated protein antibody (KVA00614, 1:1,000). Nuclei were stained blue with DAPI; ATIC associated protein was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of ATIC knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with ATIC antibody (KVA00614, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ATIC expression in C2C12 cells using ATIC antibody (KVA00614, 1:2,000). Green, isotype control; red, ATIC.