



ATIC mouse mAb

Catalog No	YP-Ab-02363
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	atic
Protein Name	
Immunogen	Purified recombinant human ATIC protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of ATIC and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	5 aminoimidazole 4 carboxamide 1 beta D ribonucleotide transformylase/inosinicase;5 aminoimidazole 4 carboxamide ribonucleotide formyltransferase;5 aminoimidazole 4 carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase;5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase;AICAR;AICAR formyltransferase/IMP cyclohydrolase bifunctional enzyme;AICAR transformylase;AICARFT;AICARFT/IMPCHASE;ATIC; Bifunctional purine biosynthesis protein PURH;FLJ93545;IMP cyclohydrolase;IMP synthase;IMP synthetase;IMPCHASE;Inosinicase;OK/SW-cl.86; Phosphoribosylaminoimidazolecarboxamide formyltransferase; Phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase;PUR9_HUMAN; PURH.
Observed Band	64kD
Cell Pathway	mitochondrion,cytosol,cell-cell adherens junction,membrane,extracellular exosome,
Tissue Specificity	Present in the heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas.



Function

catalytic activity:10-formyltetrahydrofolate + 5-amino-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide = tetrahydrofolate + 5-formamido-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide.,catalytic activity:IMP + H(2)O = 5-formamido-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide.,disease:Defects in ATIC are the cause of AICA-ribosuria [MIM:608688]; also known as AICA-ribosiduria. AICA-ribosuria is a neurologically devastating inborn error of purine biosynthesis. AICA-ribosuria patients excrete massive amounts of AICA-riboside in the urine and accumulate AICA-ribotide and its derivatives in erythrocytes and fibroblasts. AICA-ribosuria causes profound mental retardation, epilepsy, dysmorphic features and congenital blindness.,domain:The IMP cyclohydrolase activity resides in the N-terminal region.,pathway:Purine metabolism; IMP biosynthesis via de novo pathway; 5-formamido-1-(5-phospho-D-ribosyl)

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],

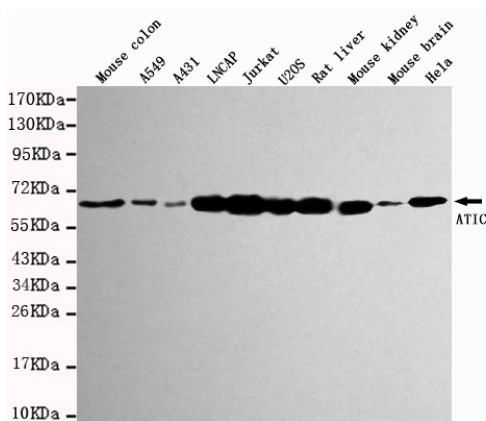
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot detection of ATIC in various tissues and cell lysates using ATIC mouse mAb (1:1000 diluted).Predicted band size:64KDa.Observed band size:64KDa.