Best Tools for immunology Research

ATIC mouse mAb

Catalog No :	YM1324
Reactivity :	Human;Mouse;Rat
Applications :	WB
Target :	ATIC
Fields :	>>Purine metabolism;>>One carbon pool by folate;>>Metabolic pathways;>>Antifolate resistance
Gene Name :	atic
Human Gene Id :	471
Human Swiss Prot No :	P31939
Mouse Swiss Prot No :	Q9CWJ9
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
Dilution :	wb 1:1000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	64kD

Cell Pathway : Purine metabolism;One carbon pool by folate;

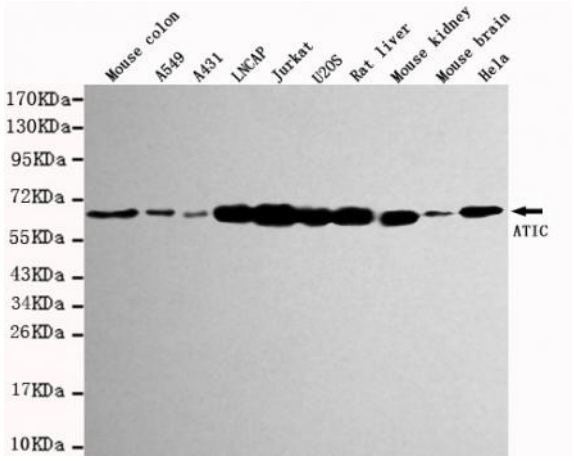
Background : This gene encodes a bifunctional protein that catalyzes the last two steps of the de novo purine biosynthetic pathway. The N-terminal domain has phosphoribosylaminoimidazolecarboxamide formyltransferase activity, and the C-terminal domain has IMP cyclohydrolase activity. A mutation in this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

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-ribosy

Subcellular Location : mitochondrion,cytosol,cell-cell adherens junction,membrane,extracellular exosome,

Expression : Present in the heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas.

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.