



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

**ATIC. Mouse Monoclonal Antibody**

AICAR; AICARFT; AICARFT/IMPCHASE; PURH; 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase

**BACKGROUND**

The bifunctional purine biosynthesis protein PURH contains phosphoribosylaminoimidazole carboxamide formyltransferase, also designated AICAR transformylase, IMP cyclohydrolase or Inosinicase. AICAR plays an important role in purine biosynthesis, specifically in the production of nucleotides and IMP. Defects in ATIC, the gene encoding for this protein, can cause AICArebosuria, also designated AICA-ribosiduria, an inborn error in purine biosynthesis that is neurologically cataclysmic. Individuals with AICA-rebosuria accumulate AICA-ribotide, also designated ZMP, and its derivatives in erythrocytes and fibroblasts and also excrete very large amounts of AICA-riboside in the urine. Mental retardation, epilepsy, dysmorphic features and congenital blindness are all symptoms of this disease.

**ORDERING INFORMATION**

**CATALOG NUMBER**

X2062M

**SIZE**

200 µg

**FORM**

Unconjugated

**HOST/CLONE**

Mouse Clone F38 P7 H9

**FORMULATION**

Provided as solution in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION**

See vial for concentration

**ISOTYPE**

IgG1

**APPLICATIONS**

Western Blot, Immunohistochemistry

**SPECIES REACTIVITY**

Human, Frog, Fruit Fly, Rat, Mouse

**ACCESSION NUMBER**

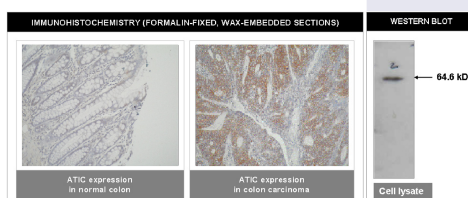
Human P31939

**IMMUNOGEN**

Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with a synthetic peptide derived from the human ATIC protein and mouse myeloma Ag8563 cells. Sequence common in frog, fruit fly, rat and mouse.

Left and Center:

Immunohistochemical staining of normal colon tissue and colon carcinoma tissue using ATIC antibody (Cat. No. X2062M). Right: Western blot using ATIC antibody on HT29 cell lysate.



**POSITIVE CONTROL/TISSUE EXPRESSION**

Colorectal cancer tissue.

**COMMENTS**

Antibody can be used for Western blotting (1-2  $\mu\text{g/ml}$ ) and immunohistochemistry on formalin-fixed, paraffin-embedded tissues (1-5  $\mu\text{g/ml}$ ). Optimal concentration should be evaluated by serial dilutions.

**PURIFICATION**

Protein A/G Chromatography

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at  $-20^{\circ}\text{C}$ . Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Bullock, K.G., et al. (2002). The kinetic mechanism of the human bifunctional enzyme ATIC (5-amino-4-imidazolecarboxamide ribonucleotide transformylase/inosine 5'-monophosphate cyclohydrolase). A surprising lack of substrate channeling. *J. Biol. Chem.* 277(25):22168-22174.
2. Marie, S., et al. (2004). AICA-ribosiduria: a novel, neurologically devastating inborn error of purine biosynthesis caused by mutation of ATIC. *Am. J. Hum. Genet.* 74(6):1276-1281.

**PRODUCT SPECIFIC REFERENCES**