

AICAR transformylase (H-270): sc-68421

BACKGROUND

The bifunctional purine biosynthesis protein ATIC (also designated PURH) contains AICAR transformylase and IMP cyclohydrolase activities. AICAR (5-aminoimidazole-4-carboxamide ribonucleotide) transformylase catalyzes the second to last step in purine biosynthesis, playing an important role in the production of nucleotides and IMP. Defects in the ATIC transformylase gene can cause AICA-rebursia, also designated AICA-ribosiduria, an inborn error in purine biosynthesis that is neurologically cataclysmic. Individuals with AICA-rebursia accumulate AICA-ribotide, also designated ZMP, and its derivatives in erythrocytes and fibroblasts. Patients 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.

CHROMOSOMAL LOCATION

Genetic locus: ATIC (human) mapping to 2q35; Atic (mouse) mapping to 1 C3.

SOURCE

AICAR transformylase (H-270) is a rabbit polyclonal antibody raised against amino acids 1-270 mapping at the N-terminus of AICAR transformylase of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

AICAR transformylase (H-270) is recommended for detection of AICAR transformylase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

AICAR transformylase (H-270) is also recommended for detection of AICAR transformylase in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for AICAR transformylase siRNA (h): sc-60139, AICAR transformylase siRNA (m): sc-60140, AICAR transformylase shRNA Plasmid (h): sc-60139-SH, AICAR transformylase shRNA Plasmid (m): sc-60140-SH, AICAR transformylase shRNA (h) Lentiviral Particles: sc-60139-V and AICAR transformylase shRNA (m) Lentiviral Particles: sc-60140-V.

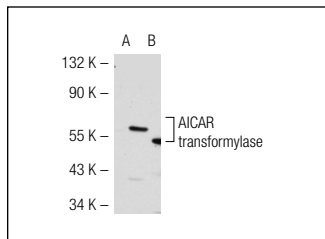
Molecular Weight of AICAR transformylase: 65 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, HeLa whole cell lysate: sc-2200 or AICAR transformylase (m): 293T Lysate : sc-118294 .

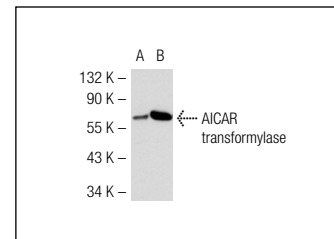
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



AICAR transformylase (H-270): sc-68421. Western blot analysis of AICAR transformylase expression in CCRF-CEM whole cell lysate (A) and human recombinant AICAR transformylase fusion protein (B).



AICAR transformylase (H-270): sc-68421. Western blot analysis of AICAR transformylase expression in non-transfected: sc-117752 (A) and mouse AICAR transformylase transfected: sc-118294 (B) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
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Try **AICAR transformylase (F38 P7 H9): sc-53612** or **AICAR transformylase (H-3): sc-365402**, our highly recommended monoclonal alternatives to AICAR transformylase (H-270).