**BACKGROUND**

SAHH (S-adenosylhomocysteine hydrolase), also known as AHCY, is a 432 amino acid cytoplasmic protein that localizes to the melanosome, a melanin-containing organelle. An essential component of amino acid biosynthesis, SAHH catalyzes the reversible hydrolysis of S-adenosylhomocysteine (SAH) to produce adenosine and L-homocysteine. Through its catalytic activity, SAHH regulates the intracellular levels of SAH and may play a key role in controlling methyltransferase reactions. SAHH exists as a homotetramer that can bind one NAD per subunit and is involved in the activated methyl cycle (a reaction in which the methyl group of methionine is activated by the formation of S-adenosylmethionine). Defects in the gene encoding SAHH result in elevated levels of methionine which cause hypermethioninemia, a disease characterized by sluggishness, muscle weakness and liver problems.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: AHCY (human) mapping to 20q11.22; Ahcy (mouse) mapping to 2 H1.

**SOURCE**

SAHH (A-6) is a mouse monoclonal antibody raised against amino acids 199-273 mapping within an internal region of SAHH of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain 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.

**APPLICATIONS**

SAHH (A-6) is recommended for detection of SAHH of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

SAHH (A-6) is also recommended for detection of SAHH in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SAHH siRNA (h): sc-62972, SAHH siRNA (m): sc-62973, SAHH shRNA Plasmid (h): sc-62972-SH, SAHH shRNA Plasmid (m): sc-62973-SH, SAHH shRNA (h) Lentiviral Particles: sc-62972-V and SAHH shRNA (m) Lentiviral Particles: sc-62973-V.

Molecular Weight of SAHH: 48 kDa.

Positive Controls: SAHH (h): 293T Lysate: sc-159779, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

**RESEARCH USE**

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

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.