# SANTA CRUZ BIOTECHNOLOGY, INC.

# SAHH (W-20): sc-55759



#### BACKGROUND

SAHH (S-adenosylhomocysteine hydrolase), also known as AHCY, is a 432 amino acid cytoplasmic protein that localizes to the melanosome, a melanincontaining 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.

# CHROMOSOMAL LOCATION

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

#### SOURCE

SAHH (W-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SAHH of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55759 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

SAHH (W-20) is recommended for detection of SAHH of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 (W-20) is also recommended for detection of S-adenosyl-Lhomocysteine hydrolase in additional species, including equine, 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.

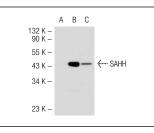
Molecular Weight of SAHH: 48 kDa.

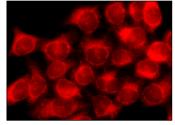
Positive Controls: SAHH (m): 293T Lysate: sc-127504, HEL 92.1.7 cell lysate: sc-2270 or HeLa whole cell lysate: sc-2200.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA





SAHH (W-20): sc-55759. Western blot analysis of SAHH expression in non-transfected 293T: sc-117752 (**A**), mouse SAHH transfected 293T: sc-127504 (**B**) and HEL 92.1.7 (**C**) whole cell lysates

SAHH (W-20): sc-55759. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

#### **RESEARCH USE**

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

## PROTOCOLS

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

#### MONOS Satisfation Guaranteed

Try SAHH (A-11): sc-271389 or SAHH (A-6): sc-393129, our highly recommended monoclonal aternatives to SAHH (W-20).