SANTA CRUZ BIOTECHNOLOGY, INC.

SIAH-1/2 (FL-282): sc-22765



BACKGROUND

SIAH, the human homolog of the *Drosophila* seven in absentia (sina) gene, is a tumor suppressor protein that is expressed in intestinal epithelium and activated during apoptosis. Human SIAH proteins are produced as two distinct gene products, SIAH-1, and the slightly larger protein SIAH-2, which share a highly conserved C-terminal sequence and differ in their N-terminal regions. SIAH-1 contains an N-terminal RING-finger domain, which is required for proteolysis, and a cystein-rich C-terminal domain, which regulates oligomerization and SIAH binding to target proteins. As a tumor suppressor, SIAH-1 binds DCC (deleted in colorectal cancer) and regulates DCC degradation via the ubiquitin-proteasome pathway. SIAH-1 also binds a Bcl-2 related protein, Bag-1, thereby inhibiting cell growth. The majority of SIAH-1 is localized to the nucleus, however a small percentage is detected in the cytoplasm. This nuclear localization suggests that SIAH proteins may interact with other nuclear matrix proteins and DNA.

REFERENCES

- Nemani, M., et al. 1996. Activation of the human homologue of the Drosophila sina gene in apoptosis and tumor suppression. Proc. Natl. Acad. Sci. USA 93: 9039-9042.
- 2. Hu, G., et al. 1997. Characterization of human homologs fo the *Drosophila* seven in absentia (sina) gene. Genomics 46: 103-111.

CHROMOSOMAL LOCATION

Genetic locus: SIAH1 (human) mapping to 16q12.1, SIAH2 (human) mapping to 3q25.1; Siah2 (mouse) mapping to 3 D.

SOURCE

SIAH-1/2 (H-18) is a rabbit polyclonal antibody raised against amino acids 1-282 representing full length SIAH-1 of human origin.

PRODUCT

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

APPLICATIONS

SIAH-1/2 (FL-282) is recommended for detection of SIAH-1 and SIAH-2 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), immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). SIAH-1/2 (FL-282) is also recommended for detection of SIAH-1 and SIAH-2 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for SIAH-1/2 siRNA (h): sc-44102, SIAH-1/2 shRNA Plasmid (h): sc-44102-SH and SIAH-1/2 shRNA (h) Lentiviral Particles: sc-44102-V.

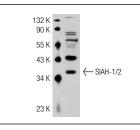
Molecular Weight of SIAH-1/2: 32 kDa.

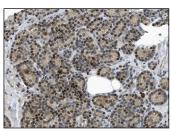
Positive Controls: HISM cell lysate: sc-2229.

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[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 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[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





SIAH-1/2 (FL-282): sc-22765. Western blot analysis of SIAH-1 and SIAH-2 expression in HISM whole cell lysate.

SIAH-1/2 (FL-282): sc-22765. Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing nuclear and cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try SIAH-1/2 (4B4B6): sc-81786 or SIAH-1/2 (8G7H12): sc-81785, our highly recommended monoclonal alternatives to SIAH-1/2 (FL-282).