SANTA CRUZ BIOTECHNOLOGY, INC.

HACS1 (L-13): sc-66385

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The Power to Question

BACKGROUND

HACS1 (hematopoietic adaptor containing SH3 and SAM domains 1) is a 373 amino acid protein encoded by the human gene SAMSN1. HACS1 is a family member of a novel group of putative adaptors and scaffold proteins containing SH3 and SAM (sterile α motif) domains. SH3 and SAM domains are protein interaction motifs that are predominantly seen in signaling molecules, adaptors and scaffold proteins. HACS1 is upregulated by IL-4, IL-13, anti-IgM and anti-CD40 in human peripheral blood B cells. In murine spleen B cells, HACS1 can also be upregulated by lipopolysaccharide but not IL-13. Induction of HACS1 by IL-4 is dependent on Stat6 signaling and can also be impaired by inhibitors of phosphatidylinositol 3-kinase, protein kinase C and NFκB. HACS1 associates with tyrosine-phosphorylated proteins after B cell activation and binds *in vitro* to the inhibitory molecule paired Ig-like receptor B. HACS1 is preferentially expressed in normal hematopoietic tissues and malignancies including myeloid leukemia, lymphoma and myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Samsn1 (mouse) mapping to 16 C3.1.

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.

SOURCE

HACS1 (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HACS1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66385 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HACS1 (L-13) is recommended for detection of HACS1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for HACS1 siRNA (m): sc-62434.

Molecular Weight of HACS1: 42 kDa.

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) 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.

PROTOCOLS

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