

HACS1 (C-15): sc-66382

BACKGROUND

HACS1 (hematopoietic adaptor containing SH3 and SAM domains 1) is a 373 amino acid protein encoded by the human gene SAMS1. 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 NF κ B. 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: SAMS1 (human) mapping to 21q11; Sams1 (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.

SOURCE

HACS1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HACS1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66382 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HACS1 (C-15) is recommended for detection of HACS1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 μ g per 100–500 μ 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).

Suitable for use as control antibody for HACS1 siRNA (h): sc-62433 and HACS1 siRNA (m): sc-62434.

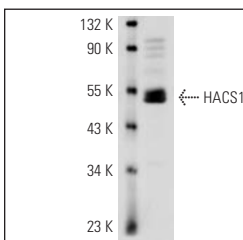
Molecular Weight of HACS1: 42 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

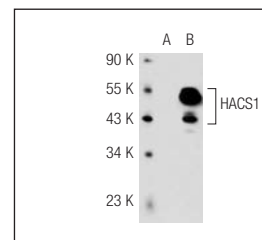
RECOMMENDED SECONDARY REAGENTS

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.

DATA



HACS1 (C-15): sc-66382. Western blot analysis of HACS1 expression in K-562 whole cell lysate.



HACS1 (C-15): sc-66382. Western blot analysis of HACS1 expression in non-transfected: sc-117752 (A) and human HACS1 transfected: sc-113689 (B) 293T whole cell lysates.

RESEARCH USE

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