

SAMSN Antibody

Catalog # ASC11565

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q9NSI8
Other Accession	NP_071419 , 48762709
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	41708
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SAMSN antibody can be used for detection of SAMSN by Western blot at 1 - 2 μ g/mL.

Additional Information

Gene ID	64092
Other Names	SAM domain-containing protein SAMSN-1, Hematopoietic adaptor containing SH3 and SAM domains 1, Nash1, SAM domain, SH3 domain and nuclear localization signals protein 1, SH3-SAM adaptor protein, SAMSN1, HAC1
Target/Specificity	SAMSN1; At least two isoforms of SAMSN are known to exist.
Reconstitution & Storage	SAMSN antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	SAMSN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SAMSN1
Synonyms	HAC1
Function	Negative regulator of B-cell activation. Down-regulates cell proliferation (in vitro). Promotes RAC1-dependent membrane ruffle formation and reorganization of the actin cytoskeleton. Regulates cell spreading and cell polarization. Stimulates HDAC1 activity. Regulates LYN activity by modulating its tyrosine phosphorylation (By similarity).
Cellular Location	Nucleus. Cytoplasm. Cell projection, ruffle. Note=Shuttles between cytoplasm

and nucleus. Colocalizes with the actin cytoskeleton and actin-rich membrane ruffles (By similarity).

Tissue Location

Detected in peripheral blood B-cells (at protein level). Detected in spleen, liver and peripheral blood

Background

SAMSN Antibody: SAMSN (HACS1) is a member of a novel gene family of putative adaptors and scaffold proteins containing SH3 and SAM (sterile alpha motif) domains. It encodes a 441 amino acid protein that is differentially expressed in hematopoietic cells and malignancies including myeloid leukemia, lymphoma, and myeloma. SAMSN has restricted expression in human tissues. It has been shown to be up-regulated by B cell activation signals and is a participant in B cell activation and differentiation. SAMSN is an immunoinhibitory adaptor that might be a useful target for immune suppression therapy.

References

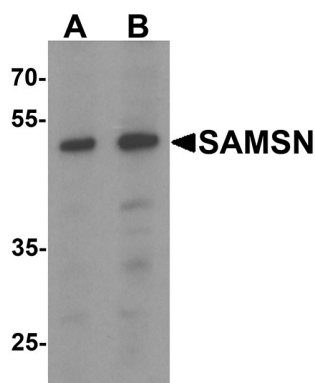
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Claudio JO, Zhu YX, Benn SJ, et al. HACS1 encodes a novel SH3-SAM adaptor protein differentially expressed in normal and malignant hematopoietic cells. *Oncogene* 2001; 20:5373-7.

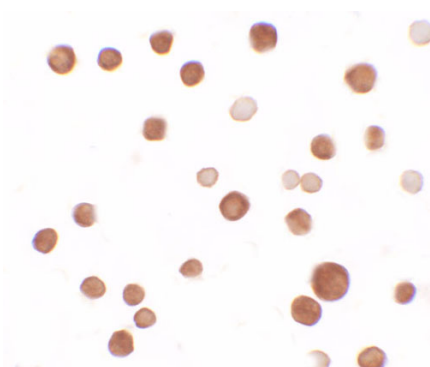
Zhu YX, Benn S, Li ZH, et al. The SH3-SAM adaptor HACS1 is up-regulated in B cell activation signaling cascades. *J. Exp. Med.* 2004; 200:737-47.

Wang D, Stewart AK, Zhuang L, et al. Enhanced adaptive immunity in mice lacking the immunoinhibitory adaptor Hacs1. *FASEB J.* 2010; 24:947-56.

Images

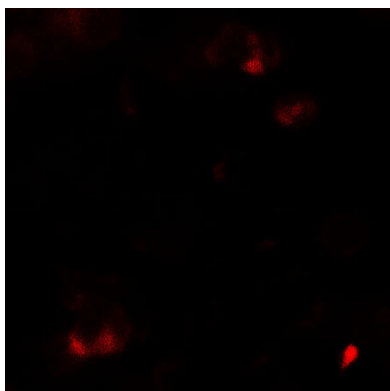


Western blot analysis of SAMSN in HeLa cell lysate with SAMSN antibody at (A) 0.5 and (B) 1 µg/mL.



Immunocytochemistry of SAMSN1 in HeLa cells with SAMSN1 antibody at 2.5 µg/mL.

Immunofluorescence of SAMSN1 in HeLa cells with SAMSN1 antibody at 5 µg/mL.



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