

**SAMSN Antibody**  
**Catalog # ASC11565****Specification**

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**SAMSN Antibody - Product Information**

|                   |                                                                                   |
|-------------------|-----------------------------------------------------------------------------------|
| Application       | WB, ICC, IF                                                                       |
| Primary Accession | <a href="#">Q9NSI8</a>                                                            |
| Other Accession   | <a href="#">NP_071419</a> , <a href="#">48762709</a>                              |
| Reactivity        | Human                                                                             |
| Host              | Rabbit                                                                            |
| Clonality         | Polyclonal                                                                        |
| Isotype           | IgG                                                                               |
| Calculated MW     | 41 kDa KDa                                                                        |
| Application Notes | SAMSN antibody can be used for detection of SAMSN by Western blot at 1 - 2 µg/mL. |

**SAMSN Antibody - Additional Information**Gene ID **64092****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.

**SAMSN Antibody - Protein Information****Name** SAMSN1**Synonyms** HACSI1**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

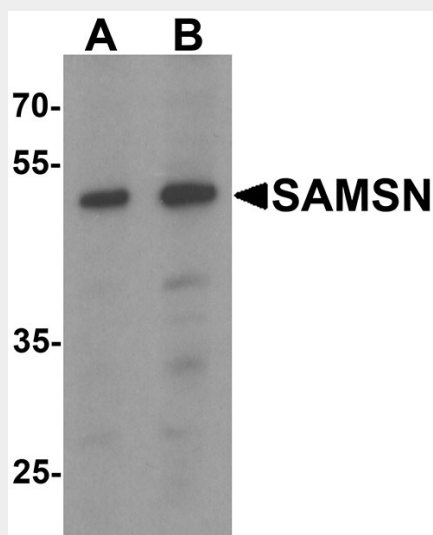
blood

### SAMSN Antibody - Protocols

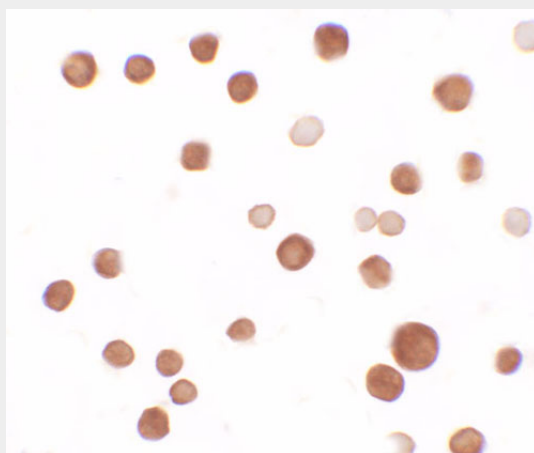
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

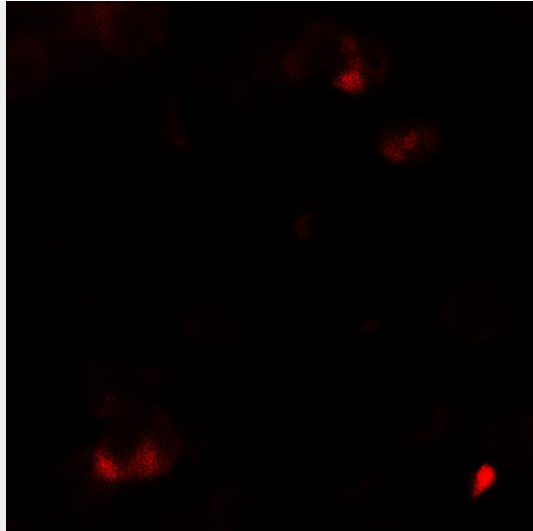
### SAMSN Antibody - Images



Western blot analysis of SAMSN in HeLa cell lysate with SAMSN antibody at (A) 0.5 and (B) 1  $\mu\text{g/mL}$ .



Immunocytochemistry of SAMSN1 in HeLa cells with SAMSN1 antibody at 2.5  $\mu\text{g/mL}$ .



Immunofluorescence of SAMS1 in HeLa cells with SAMS1 antibody at 5 µg/ml.

### **SAMS1 Antibody - Background**

**SAMS1 Antibody:** SAMS1 (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. SAMS1 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. SAMS1 is an immunoinhibitory adaptor that might be a useful target for immune suppression therapy.

### **SAMS1 Antibody - References**

Uchida T, Nakao A, Nakano N, et al. Identification of Nash1, a novel protein containing a nuclear localization signal, a sterile alpha motif, and an SH3 domain preferentially expressed in mast cells. *Biochem. Biophys. Res. Commun.* 2001; 288:137-41.

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.