## SANTA CRUZ BIOTECHNOLOGY, INC.

# ASB-1 (C-17): sc-19926



## BACKGROUND

Members of the suppressor of cytokine signaling (SOCS) family of proteins contain C-terminal regions of homology called the SOCS box, which serves to couple SOCS proteins and their binding partners with the elongin B and C complex. Serveral other families of proteins also contain SOCS boxes but differ from the SOCS proteins in the type of domain they contained upstream of the SOCS box. Four members of the ankyrin repeat and SOCS box-containing (ASB) protein family are identified and termed as ASB-1, ASB-2, ASB-3, and ASB-4. ASB-1 is expressed in multiple organs, including the hematopoietic compartment. ASB-1 knock-out mice display a diminution of spermatogenesis with less complete filling of seminiferous tubules. ASB-2 is a novel retinoic-acid (RA)-induced gene in acute promyelocytic leukemia (APL) cells and its expression induces growth-inhibition and chromatin condensation recapitulating early events critical to RA-induced differentiaiton of APL cells. ASB-2 is directly induced by all-trans retinotic acid, by the binding of RARα to the RAR binding element/RXR binding element in the ASB-2 promoter.

## REFERENCES

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- Kile, B.T., Metcalf, D., Mifsud, S., DiRago, L., Nicola, N.A., Hilton, D.J., and Alexander, W.S. 2001. Functional analysis of ASB-1 using genetic modification in mice. Mol. Cell. Biol. 21: 6189-6197.
- Guibal, F.C., Moog-Lutz, C., Smolewski, P., Di Gioia, Y., Darzynkiewicz, Z., Lutz, P.G., and Cayre, Y.E. 2001. ASB-2 inhibits growth and promotes commitment in Myeloid Leukemia cells. J. Biol. Chem. 277: 218-224.
- Kohroki, J., Fujita, S., Itoh, N., Yamada, Y., Imai, H., Yumoto, N., Nakanishi, T., and Tanaka, K. 2001. ATRA-regulated ASB-2 gene induced in differentiation of HL-60 leukemia cells. FEBS Lett. 505: 223-228.

## CHROMOSOMAL LOCATION

Genetic locus: ASB1 (human) mapping to 2q37.3; Asb1 (mouse) mapping to 1 D.

## SOURCE

ASB-1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ASB-1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19926 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ASB-1 (C-17) is recommended for detection of ASB-1 of mouse, rat and human 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).

ASB-1 (C-17) is also recommended for detection of ASB-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ASB-1 siRNA (h): sc-40348, ASB-1 siRNA (m): sc-40349, ASB-1 shRNA Plasmid (h): sc-40348-SH, ASB-1 shRNA Plasmid (m): sc-40349-SH, ASB-1 shRNA (h) Lentiviral Particles: sc-40348-V and ASB-1 shRNA (m) Lentiviral Particles: sc-40349-V.

## **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) Immunofluo-rescence: 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.

## **STORAGE**

Store at 4° C, \*\*D0 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.