SANTA CRUZ BIOTECHNOLOGY, INC.

# ASB-3 (C-12): sc-19933

## 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 RAR$\alpha$ to the RAR binding element/RXR binding element in the ASB-2 promoter.

## REFERENCES


1. Hilton, D.J., et al. 1998. Twenty proteins containing a C-terminal SOCS box form five structural classes. Proc. Natl. Acad. Sci. USA 95: 114-119.
2. Kile, B.T., et al. 2000. Cloning and characterization of the genes encoding the ankyrin repeat and SOCS box-containing proteins Asb-1, Asb-2, Asb-3 and Asb-4. Gene 258: 331-341.
3. Kile, B.T., et al. 2001. Functional analysis of Asb-1 using genetic modification in mice. Mol. Cell. Biol. 21: 6189-6197.
4. Guibal, F.C., et al. 2001. ASB-2 inhibits growth and promotes commitment in myeloid leukemia cells. J. Biol. Chem. 277: 218-224.
5. Kohroki, J., et al. 2001. ATRA-regulated Asb-2 gene induced in differentiation of HL-60 leukemia cells. FEBS Lett. 505: 223-228.


## CHROMOSOMAL LOCATION

Genetic locus: ASB3 (human) mapping to 2p16.2.

## SOURCE

ASB-3 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ASB-3 of human 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-19933 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

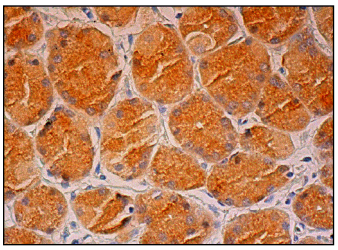
ASB-3 (C-12) is recommended for detection of ASB-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution 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 ASB-3 siRNA (h): sc-40352, ASB-3 shRNA Plasmid (h): sc-40352-SH and ASB-3 shRNA (h) Lentiviral Particles: sc-40352-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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



ASB-3 (C-12): sc-19933. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

## PROTOCOLS

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