

# ASB-13 (S-18): sc-83098

## 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/C complex. Several other families of proteins also contain SOCS boxes, but differ from the SOCS proteins in the type of domain they contain upstream of the SOCS box. The largest family of SOCS box-containing proteins is the ankyrin repeat and SOCS box-containing (ASB) protein family. ASB-13 (ankyrin repeat and SOCS box-containing 13) is a 278 amino acid member of the ASB family that contains one SOCS box domain and 6 ANK repeats. Existing as multiple isoforms, ASB-13 functions as a substrate-recognition component of an E3 ubiquitin-protein ligase complex and, working in conjunction with other proteins, plays a role in the ubiquitination and subsequent proteasomal degradation of target proteins.

## REFERENCES

1. Bork, P. 1993. Hundreds of ankyrin-like repeats in functionally diverse proteins: mobile modules that cross phyla horizontally? *Proteins* 17: 363-374.
2. 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.
3. 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.
4. Kile, B.T., et al. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
5. Liu, Y., et al. 2003. Molecular cloning and characterization of the human ASB-8 gene encoding a novel member of ankyrin repeat and SOCS box containing protein family. *Biochem. Biophys. Res. Commun.* 300: 972-979.
6. Kohroki, J., et al. 2005. ASB proteins interact with Cullin5 and Rbx2 to form E3 ubiquitin ligase complexes. *FEBS Lett.* 579: 6796-6802.
7. Yoshida, K. 2005. Identification and characterization of ankyrin repeat and SOCS box-containing gene ASB-15 *in silico*. *Int. J. Mol. Med.* 16: 343-347.
8. Debrincat, M.A., et al. 2007. Ankyrin repeat and suppressors of cytokine signaling box protein ASB-9 targets creatine kinase B for degradation. *J. Biol. Chem.* 282: 4728-4737.
9. McDanel, T.G. and Spurlock, D.M. 2008. Ankyrin repeat and suppressor of cytokine signaling (SOCS) box-containing protein (ASB) 15 alters differentiation of mouse C2C12 myoblasts and phosphorylation of mitogen-activated protein kinase and Akt. *J. Anim. Sci.* 86: 2897-2902.

## CHROMOSOMAL LOCATION

Genetic locus: ASB13 (human) mapping to 10p15.1; Asb13 (mouse) mapping to 13 A1.

## SOURCE

ASB-13 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ASB-13 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-83098 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ASB-13 (S-18) is recommended for detection of ASB-13 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); non cross-reactive with other ASB family members.

ASB-13 (S-18) is also recommended for detection of ASB-13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ASB-13 siRNA (h): sc-72546, ASB-13 siRNA (m): sc-72547, ASB-13 shRNA Plasmid (h): sc-72546-SH, ASB-13 shRNA Plasmid (m): sc-72547-SH, ASB-13 shRNA (h) Lentiviral Particles: sc-72546-V and ASB-13 shRNA (m) Lentiviral Particles: sc-72547-V.

Molecular Weight of ASB-13: 30 kDa.

## 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.