

# ASB-8 (S-14): sc-109207

## 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-8 (ankyrin repeat and SOCS box-containing 8) is a 288 amino acid member of the ASB family that contains one SOCS box domain and 4 ANK repeats. Localized to the cytoplasm, ASB-8 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. The highest level of ASB-8 expression has been detected in skeletal muscle. ASB-8 is also expressed in heart, brain, placenta, liver, kidney and pancreas.

## REFERENCES

1. 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.
2. Liu, Y.Z., et al. 2003. Exogenous expression of SOCS box-deficient mutant ASB-8 suppresses the growth of lung adenocarcinoma SPC-A1 cells. *Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao* 35: 548-553.
3. Wilcox, A., et al. 2004. ASB-6, an adipocyte-specific ankyrin and SOCS box protein, interacts with APS to enable recruitment of Elongins B and C to the Insulin receptor signaling complex. *J. Biol. Chem.* 279: 38881-38888.
4. Kohroki, J., et al. 2005. ASB proteins interact with Cullin5 and Rbx2 to form E3 ubiquitin ligase complexes. *FEBS Lett.* 579: 6796-6802.
5. 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.
6. 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.

## CHROMOSOMAL LOCATION

Genetic locus: ASB8 (human) mapping to 12q13.11; Asb8 (mouse) mapping to 15 F1.

## SOURCE

ASB-8 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ASB-8 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-109207 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ASB-8 (S-14) is recommended for detection of ASB-8 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), 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); non cross-reactive with other ASB family members.

ASB-8 (S-14) is also recommended for detection of ASB-8 in additional species, including equine, canine, bovine, porcine and avian.

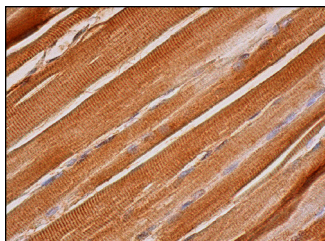
Suitable for use as control antibody for ASB-8 siRNA (h): sc-96203, ASB-8 siRNA (m): sc-141292, ASB-8 shRNA Plasmid (h): sc-96203-SH, ASB-8 shRNA Plasmid (m): sc-141292-SH, ASB-8 shRNA (h) Lentiviral Particles: sc-96203-V and ASB-8 shRNA (m) Lentiviral Particles: sc-141292-V.

Molecular Weight of ASB-8: 32 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



ASB-8 (S-14): sc-109207. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes.

## 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.