

ASB-9 (h2): 293 Lysate: sc-113269

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. 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. Members of the ASB family include ASB-1 through ASB-18 and are involved in a variety of biological processes. ASB-9 is a 294 amino acid member of this family. It contains six ankyrin repeats and one SOCS box domain. ASB-9 functions as a ubiquitin ligase and, via its SOCS box domain, it specifically interacts with creatine kinase-B, targeting it for degradation and regulating its expression within the cell. Two isoforms exist for ASB-9 due to alternative splicing events.

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., Richardson, R.T., Alexander, W.S., Viney, E.M., Willson, T.A., Sprigg, N.S., Starr, R., Nicholson, S.E., Metcalf, D. and Nicola, N.A. 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., Viney, E.M., Willson, T.A., Brodnicki, T.C., Cancilla, M.R., Herlky, A.S., Croker, B.A., Baca, M., Nicola, N.A., Hilton, D.J. and Alexander, W.S. 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., Schulman, B.A., Alexander, W.S., Nicola, N.A., Martin, H.M. and Hilton, D.J. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
5. Kohroki, J., Nishiyama, T., Nakamura, T. and Masuho, Y. 2005. ASB proteins interact with Cullin5 and Rbx2 to form E3 ubiquitin ligase complexes. *FEBS Lett.* 579: 6796-6802.
6. Debrincat, M.A., Zhang, J.G., Willson, T.A., Silke, J., Connolly, L.M., Simpson, R.J., Alexander, W.S., Nicola, N.A., Kile, B.T. and Hilton, D.J. 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: ASB9 (human) mapping to Xp22.2.

PRODUCT

ASB-9 (h2): 293 Lysate represents a lysate of human ASB-9 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ASB-9 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive ASB-9 antibodies. Recommended use: 10-20 µl per lane.

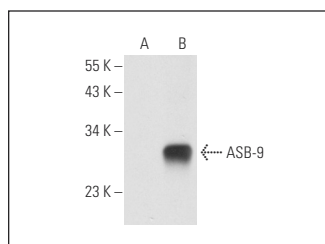
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

ASB-9 (E-12): sc-166723 is recommended as a positive control antibody for Western Blot analysis of enhanced human ASB-9 expression in ASB-9 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ASB-9 (E-12): sc-166723. Western blot analysis of ASB-9 expression in non-transfected: sc-110760 (A) and human ASB-9 transfected: sc-113269 (B) 293 whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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