

ASB-10 (QQ6): sc-100677

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-10 is a 467 amino acid member of this family. It contains seven ankyrin repeats and one SOCS box domain. In contrast to the common LC sequence in the conserved BC box subdomain of the SOCS box, ASB-10 contains an LS sequence. This replacement of LC with LS is not known to interfere with any protein interactions. Two isoforms exist 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., Herkhy, 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: ASB10 (human) mapping to 7q36.1; Asb10 (mouse) mapping to 5 A3.

SOURCE

ASB-10 (QQ6) is a mouse monoclonal antibody raised against recombinant ASB-10 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ASB-10 (QQ6) is recommended for detection of ASB-10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ASB-10 siRNA (h): sc-89586, ASB-10 siRNA (m): sc-105097, ASB-10 shRNA Plasmid (h): sc-89586-SH, ASB-10 shRNA Plasmid (m): sc-105097-SH, ASB-10 shRNA (h) Lentiviral Particles: sc-89586-V and ASB-10 shRNA (m) Lentiviral Particles: sc-105097-V.

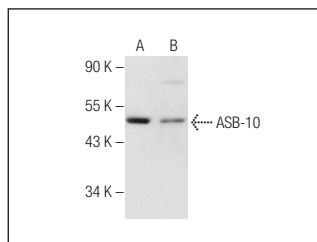
Molecular Weight of ASB-10: 51 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, NIH/3T3 whole cell lysate: sc-2210 or A-431 whole cell lysate: sc-2201.

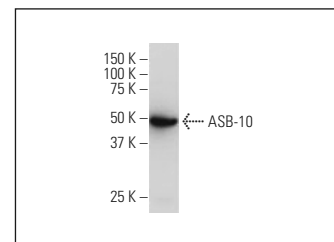
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ASB-10 (QQ6): sc-100677. Western blot analysis of ASB-10 expression in PC-12 (A) and NIH/3T3 (B) whole cell lysates.



ASB-10 (QQ6): sc-100677. Western blot analysis of ASB-10 expression in A-431 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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