SANTA CRUZ BIOTECHNOLOGY, INC.

ASB-15 (V-19): sc-83361

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-15 (ankyrin repeat and SOCS box-containing 15) is a 588 amino acid protein that contains one SOCS box domain and nine ANK repeats and belongs to the ASB family. Involved in the pathway of protein degradation, ASB-15 functions as a substrate-recognition component of the SCF-like ECS (Elongin-Cullin-SOCS-box protein) 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

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3. Kile, B.T. and Alexander, W.S. 2001. The suppressors of cytokine signalling (SOCS). Cell. Mol. Life Sci. 58: 1627-1635.
4. Larsen, L. and Röpke, C. 2002. Suppressors of cytokine signalling: SOCS. APMIS 110: 833-844.
5. 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.
6. 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.
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CHROMOSOMAL LOCATION

Genetic locus: ASB15 (human) mapping to 7q31.32; Asb15 (mouse) mapping to 6 A3.1.

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.

SOURCE

ASB-15 (V-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ASB-15 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-83361 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ASB-15 (V-19) is recommended for detection of ASB-15 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)], 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-15 (V-19) is also recommended for detection of ASB-15 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ASB-15 siRNA (h): sc-72550, ASB-15 siRNA (m): sc-72551, ASB-15 shRNA Plasmid (h): sc-72550-SH, ASB-15 shRNA Plasmid (m): sc-72551-SH, ASB-15 shRNA (h) Lentiviral Particles: sc-72550-V and ASB-15 shRNA (m) Lentiviral Particles: sc-72551-V.

Molecular Weight of ASB-15: 66 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

PROTOCOLS

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