

# ASB-18 (D-17): sc-241838

## BACKGROUND

ASB-18 (ankyrin repeat and SOCS box-containing 18), also known as ASB18, is a 466 amino acid protein that contains 6 ANK repeats and one SOCS box domain, which governs interaction with the Elongin BC complex, an adapter module in E3 ubiquitin-protein ligase complexes. ASB-18, like other ASB family proteins, interacts with CUL-5-Rbx2 to form E3 ubiquitin ligases and plays a significant role in ubiquitination-mediated pathways. ASB-18 may function as a substrate-recognition component of an SCF-like ECS (Elongin-Cullin-SOCS-box protein) E3 ubiquitin-protein ligase complex, which regulates ubiquitination and subsequent proteasomal degradation of target proteins. Conserved in chimpanzee, canine, mouse, chicken and zebrafish, ASB-18 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 2q37.2.

## REFERENCES

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2. Zhang, J.G., et al. 2001. The SOCS box of suppressor of cytokine signaling-1 is important for inhibition of cytokine action *in vivo*. *Proc. Natl. Acad. Sci. USA* 98: 13261-13265.
3. Kile, B.T., et al. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
4. Sogaard, M., et al. 2005. Subtelomeric study of 132 patients with mental retardation reveals 9 chromosomal anomalies and contributes to the delineation of submicroscopic deletions of 1pter, 2qter, 4pter, 5qter and 9qter. *BMC Med. Genet.* 6: 21.
5. Kohroki, J., et al. 2005. ASB proteins interact with Cullin5 and Rbx2 to form E3 ubiquitin ligase complexes. *FEBS Lett.* 579: 6796-6802.
6. Li, J.Y., et al. 2007. Ankyrin repeat and SOCS box containing protein 4 (Asb-4) interacts with GPS1 (CSN1) and inhibits c-Jun NH<sub>2</sub>-terminal kinase activity. *Cell. Signal.* 19: 1185-1192.
7. Norris, J.M., et al. 2009. Genome-wide association study and follow-up analysis of adiposity traits in Hispanic Americans: the IRAS Family Study. *Obesity* 17: 1932-1941.

## CHROMOSOMAL LOCATION

Genetic locus: ASB18 (human) mapping to 2q37.2.

## SOURCE

ASB-18 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ASB-18 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-241838 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ASB-18 (D-17) is recommended for detection of ASB-18 of 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).

Suitable for use as control antibody for ASB-18 siRNA (h): sc-94842, ASB-18 shRNA Plasmid (h): sc-94842-SH and ASB-18 shRNA (h) Lentiviral Particles: sc-94842-V.

Molecular Weight of ASB-18 isoform 1: 51 kDa.

Molecular Weight of ASB-18 isoform 2: 48 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.