ASB-18 (W-20): sc-241840



The Power to Question

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

- Breen, M., et al. 1997. Genetical and physical assignments of equine microsatellites—first integration of anchored markers in horse genome mapping. Mamm. Genome 8: 267-273.
- 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 NH₂-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 (mouse) mapping to 1 D.

SOURCE

ASB-18 (W-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ASB-18 of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241840 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ASB-18 (W-20) is recommended for detection of ASB-18 of mouse and rat 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 (m): sc-141290, ASB-18 shRNA Plasmid (m): sc-141290-SH and ASB-18 shRNA (m) Lentiviral Particles: sc-141290-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) 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 or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**