

ASB-6 (H-8): sc-515649

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-6 (ankyrin repeat and SOCS box-containing 6) is a 421 amino acid member of the ASB family that contains one SOCS box domain and 6 ANK repeats. Localized to the cytoplasm, ASB-6 functions as a substrate-recognition component of an 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

1. Kile, B.T., et al. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
2. Liu, Y., et al. 2003. Molecular cloning and characterization of the human ASB-8 gene encoding a novel member of ankyrin repeat and SOCS box containing protein family. *Biochem. Biophys. Res. Commun.* 300: 972-979.

CHROMOSOMAL LOCATION

Genetic locus: ASB6 (human) mapping to 9q34.11.

SOURCE

ASB-6 (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 245-269 within an internal region of ASB-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ASB-6 (H-8) is available conjugated to agarose (sc-515649 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515649 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515649 PE), fluorescein (sc-515649 FITC), Alexa Fluor® 488 (sc-515649 AF488), Alexa Fluor® 546 (sc-515649 AF546), Alexa Fluor® 594 (sc-515649 AF594) or Alexa Fluor® 647 (sc-515649 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515649 AF680) or Alexa Fluor® 790 (sc-515649 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515649 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

ASB-6 (H-8) is recommended for detection of ASB-6 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ASB-6 siRNA (h): sc-72558, ASB-6 shRNA Plasmid (h): sc-72558-SH and ASB-6 shRNA (h) Lentiviral Particles: sc-72558-V.

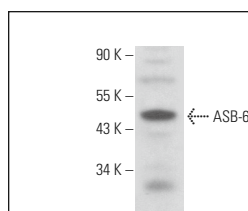
Molecular Weight of ASB-6: 47 kDa.

Positive Controls: human liver extract: sc-363766 or Hep G2 cell lysate: sc-2227.

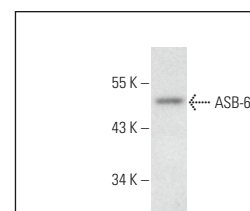
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ASB-6 (H-8): sc-515649. Western blot analysis of ASB-6 expression in Hep G2 whole cell lysate.



ASB-6 (H-8): sc-515649. Western blot analysis of ASB-6 expression in human liver tissue extract.

SELECT PRODUCT CITATIONS

1. Hung, K.F., et al. 2019. ASB6 promotes the stemness properties and sustains metastatic potential of oral squamous cell carcinoma cells by attenuating ER stress. *Int. J. Biol. Sci.* 15: 1080-1090.
2. Zeng, W., et al. 2022. m⁶A-modified circFNDC3B inhibits colorectal cancer stemness and metastasis via RNF41-dependent ASB6 degradation. *Cell Death Dis.* 13: 1008.

RESEARCH USE

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