# SANTA CRUZ BIOTECHNOLOGY, INC.

# SSB-4 (N-13): sc-99642



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 BC complex, thereby mediating protein degradation. 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. SSB-4, also known as SPSB4 (spIA/ ryanodine receptor domain and SOCS box containing 4), is a 273 amino acid protein that localizes to the cytoplasm and contains one SOCS box domain and one B30.2/SPRY domain. Functioning as a substrate recognition component of the Elongin BC complex, SSB-4 plays a role in the ubiquitination and subsequent proteasomal degradation of target proteins.

# REFERENCES

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- Wang, D., Li, Z., Messing, E.M. and Wu, G. 2005. The SPRY domain-containing SOCS box protein 1 (SSB-1) interacts with MET and enhances the hepatocyte growth factor-induced Erk-Elk-1-serum response element pathway. J. Biol. Chem. 280: 16393-16401.
- Woo, J.S., Suh, H.Y., Park, S.Y. and Oh, B.H. 2006. Structural basis for protein recognition by B30.2/SPRY domains. Mol. Cell. 24: 967-976.
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# CHROMOSOMAL LOCATION

Genetic locus: SPSB4 (human) mapping to 3q23; Spsb4 (mouse) mapping to E3.3.

#### SOURCE

SSB-4 (N-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SSB-4 of human origin.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

# PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99642 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

SSB-4 (N-13) is recommended for detection of SSB-4 of mouse, rat and 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); non cross-reactive with SSB-1, SSB-2 or SSB-3.

Suitable for use as control antibody for SSB-4 siRNA (h): sc-78045, SSB-4 siRNA (m): sc-153839, SSB-4 shRNA Plasmid (h): sc-78045-SH, SSB-4 shRNA Plasmid (m): sc-153839-SH, SSB-4 shRNA (h) Lentiviral Particles: sc-78045-V and SSB-4 shRNA (m) Lentiviral Particles: sc-153839-V.

Molecular Weight of SSB-4: 30 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.