SANTA CRUZ BIOTECHNOLOGY, INC.

SPOUT1 (H-7): sc-393263

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 9 consists of about 145 million bases and 4% of the human genome, encoding nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene-encoding Endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 though through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

1. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
2. Coppo, P., et al. 2006. Bcr-Abl activates STAT3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
3. Zheng, X., et al. 2006. Bcr and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. BMC Cancer 6: 262.
4. Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.

CHROMOSOMAL LOCATION

Genetic locus: SPOUT1 (human) mapping to 9q34.11; Spout1 (mouse) mapping to 2 B.

SOURCE

SPOUT1 (H-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 78-99 within an internal region of SPOUT1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SPOUT1 (H-7) is available conjugated to agarose (sc-393263 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393263 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393263 PE), fluorescein (sc-393263 FITC), Alexa Fluor® 488 (sc-393263 AF488), Alexa Fluor® 546 (sc-393263 AF546), Alexa Fluor® 594 (sc-393263 AF594) or Alexa Fluor® 647 (sc-393263 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393263 AF680) or Alexa Fluor® 790 (sc-393263 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393263 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SPOUT1 (H-7) is recommended for detection of SPOUT1 of mouse, rat and 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).

SPOUT1 (H-7) is also recommended for detection of SPOUT1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SPOUT1 siRNA (h): sc-92746, SPOUT1 siRNA (m): sc-141946, SPOUT1 shRNA Plasmid (h): sc-92746-SH, SPOUT1 shRNA Plasmid (m): sc-141946-SH, SPOUT1 shRNA (h) Lentiviral Particles: sc-92746-V and SPOUT1 shRNA (m) Lentiviral Particles: sc-141946-V.

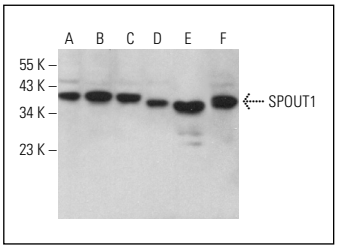
Molecular Weight of SPOUT1: 42 kDa.

Positive Controls: SPOUT1 (h6): 293T Lysate: sc-371223, IMR-32 cell lysate: sc-2409 or RT-4 whole cell lysate: sc-364257.

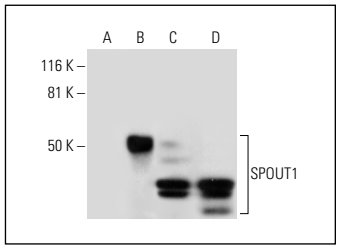
RECOMMENDED SUPPORT REAGENTS

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



SPOUT1 (H-7): sc-393263. Western blot analysis of SPOUT1 expression in IMR-32 (**A**), HUV-EC-C (**B**), Caco-2 (**C**), RAW 264.7 (**D**) and 3611-RF (**E**) whole cell lysates and NIH/3T3 nuclear extract (**F**).



SPOUT1 (H-7): sc-393263. Western blot analysis of SPOUT1 expression in non-transfected 293T: sc-117752 (**A**), human SPOUT1 transfected 293T: sc-371223 (**B**), IMR-32 (**C**) and RT-4 (**D**) whole cell lysates.

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.