SANTA CRUZ BIOTECHNOLOGY, INC.

Spi-C (C-2): sc-514526

BACKGROUND

The Ets transcription factor family is comprised of DNA-binding proteins that influence lymphoid development and activity and bind the consensus DNA site GGA(A/T) through a unique winged helix-turn-helix motif known as the Ets domain. Spi-B and Spi-C (also known as SPIC) are closely related Ets family members which share a conserved divergent sequence within the Ets domain that enables their binding to non-canonical AGAA sites. Spi-C is a 248 amino acid protein that localizes to the nucleus and, like other Ets family members, binds DNA as a monomer and plays a role in transcriptional regulation. Additionally, Spi-C is thought to control the development of red pulp macrophages, thereby contributing to iron homeostasis and red blood cell recycling. Human Spi-C shares 65% amino acid identity with its mouse counterpart, suggesting a conserved role between species.

REFERENCES

1. Carlsson, R., et al. 2002. Genomic structure of mouse SPI-C and genomic structure and expression pattern of human SPI-C. Gene 299: 271-278.
2. Kageyama, S., et al. 2006. The role of ETS transcription factors in transcription and development of mouse preimplantation embryos. Biochem. Biophys. Res. Commun. 344: 675-679.
3. Carlsson, R., et al. 2006. Spi-C and Stat6 can cooperate to stimulate IgE germline transcription. Biochem. Biophys. Res. Commun. 344: 1155-1160.
4. Guillouf, C., et al. 2006. Spi-1/PU.1 oncoprotein affects splicing decisions in a promoter binding-dependent manner. J. Biol. Chem. 281: 19145-19155.
5. Schweitzer, B.L., et al. 2006. Spi-C has opposing effects to PU.1 on gene expression in progenitor B cells. J. Immunol. 177: 2195-2207.

CHROMOSOMAL LOCATION

Genetic locus: SPIC (human) mapping to 12q23.2.

SOURCE

Spi-C (C-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 9-32 near the N-terminus of Spi-C of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-514526 X, 200 µg/0.1 ml.

Spi-C (C-2) is available conjugated to agarose (sc-514526 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514526 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514526 PE), fluorescein (sc-514526 FITC), Alexa Fluor® 488 (sc-514526 AF488), Alexa Fluor® 546 (sc-514526 AF546), Alexa Fluor® 594 (sc-514526 AF594) or Alexa Fluor® 647 (sc-514526 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514526 AF680) or Alexa Fluor® 790 (sc-514526 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM..

Blocking peptide available for competition studies, sc-514526 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Spi-C (C-2) is recommended for detection of Spi-C 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 Spi-C siRNA (h): sc-76561, Spi-C shRNA Plasmid (h): sc-76561-SH and Spi-C shRNA (h) Lentiviral Particles: sc-76561-V.

Spi-C (C-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of Spi-C: 28 kDa.

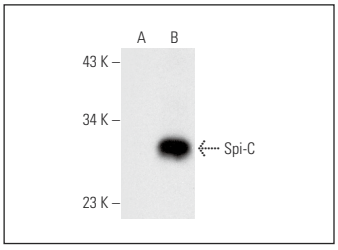
Molecular Weight (observed) of Spi-C: 36 kDa.

Positive Controls: Spi-C (h): 293T Lysate: sc-114948.

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



Spi-C (C-2): sc-514526. Western blot analysis of Spi-C expression in non-transfected: sc-117752 (**A**) and human Spi-C transfected: sc-114948 (**B**) 293T 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.