Spi-C (G-20): sc-79600



The Power to Question

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

- Carlsson, R., et al. 2002. Genomic structure of mouse Spic and genomic structure and expression pattern of human SPIC. Gene 299: 271-278.
- 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.
- Carlsson, R., et al. 2006. Spi-C and Stat6 can cooperate to stimulate IgE germline transcription. Biochem. Biophys. Res. Commun. 344: 1155-1160.
- 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.
- Zhu, X., et al. 2008. Transgenic expression of Spi-C impairs B cell development and function by affecting genes associated with Bcr signaling. Eur. J. Immunol. 38: 2587-2599.
- 7. Uchiya, K., et al. 2008. Salmonella virulence factor Spi-C is involved in expression of flagellin protein and mediates activation of the signal transduction pathways in macrophages. Microbiology 154: 3491-3502.
- 8. Kohyama, M., et al. 2009. Role for Spi-C in the development of red pulp macrophages and splenic iron homeostasis. Nature 457: 318-321.
- 9. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612568. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

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

SOURCE

Spi-C (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Spi-C of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG 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-79600 X, 200 μg /0.1 ml.

Blocking peptide available for competition studies, sc-79600 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Spi-C (G-20) is recommended for detection of Spi-C of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Spi-C (G-20) is also recommended for detection of Spi-C in additional species, including equine and canine.

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.

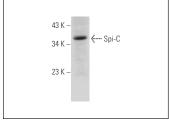
Spi-C (G-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

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

Positive Controls: HeLa whole cell lysate: sc-2200.

DATA



Spi-C (G-20): sc-79600. Western blot analysis of Spi-C expression in HeLa whole cell lysate.

RESEARCH USE

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



Try **Spi-C (C-2): sc-514526**, our highly recommended monoclonal alternative to Spi-C (G-20).

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