SANTA CRUZ BIOTECHNOLOGY, INC.

CIZ1 (F-17): sc-107184



BACKGROUND

CIZ1 (Cip1-interacting zinc finger protein, CDKN1A-interacting zinc finger protein 1) is a 898 amino acid protein encoded by the human gene CIZ1. CIZ1, a nuclear protein, is a member of the matrin 3 family that contains one matrin-type zinc finger. CIZ1 is composed of two functionally distinct domains: an N-terminal replication domain and a C-terminal nuclear matrix anchor. Patterns of CIZ1 isoform expression have the potential to influence DNA replication, as the exclusion of exon 4 influences the spatial distribution of the CIZ1 protein within the nucleus.

REFERENCES

- Warder, D.E. and Keherly, M.J. 2003. CIZ1, Cip1-interacting zinc finger protein 1 binds the consensus DNA sequence ARYSR(0-2)YYAC. J. Biomed. Sci. 10: 406-417.
- Miccoli, L., Biard, D.S., Frouin, I., Harper, F., Maga, G. and Angulo, J.F. 2003. Selective interactions of human KIN17 and RPA proteins with chromatin and the nuclear matrix in a DNA damage- and cell cycle-regulated manner. Nucleic Acids Res. 31: 4162-4175.
- Coverley, D., Marr, J. and Ainscough, J. 2004. CIZ1 promotes mammalian DNA replication. J. Cell Sci. 118: 101-112.
- Anachkova, B., Djeliova, V. and Russev, G. 2005. Nuclear matrix support of DNA replication. J. Cell. Biochem. 96: 951-961.
- Radichev, I., Parashkevova, A. and Anachkova, B. 2005. Initiation of DNA replication at a nuclear matrix-attached chromatin fraction. J. Cell. Physiol. 203: 71-77.
- Ainscough, J.F., Rahman, F.A., Sercombe, H., Sedo, A., Gerlach, B. and Coverley, D. 2006. C-terminal domains deliver the DNA replication factor CIZ1 to the nuclear matrix. J. Cell Sci. 120: 115-124.
- Rahman, F.A., Ainscough, J.F., Copeland, N. and Coverley, D. 2007. Cancerassociated missplicing of exon 4 influences the subnuclear distribution of the DNA replication factor CIZ1. Hum. Mutat. 28: 993-1004.
- Lukasik, A., Uniewicz, K.A., Kulis, M. and Kozlowski, P. 2008. CIZ1, a p21(Cip1/Waf1)-interacting zinc finger protein and DNA replication factor, is a novel molecular partner for human enhancer of rudimentary homolog. FEBS J. 275: 332-340.

CHROMOSOMAL LOCATION

Genetic locus: CIZ1 (human) mapping to 9q34.11; Ciz1 (mouse) mapping to 2 B.

SOURCE

CIZ1 (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CIZ1 of mouse 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.

Blocking peptide available for competition studies, sc-107184 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CIZ1 (F-17) is recommended for detection of CIZ1 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).

Suitable for use as control antibody for CIZ1 siRNA (h): sc-92905, CIZ1 siRNA (m): sc-142350, CIZ1 shRNA Plasmid (h): sc-92905-SH, CIZ1 shRNA Plasmid (m): sc-142350-SH, CIZ1 shRNA (h) Lentiviral Particles: sc-92905-V and CIZ1 shRNA (m) Lentiviral Particles: sc-142350-V.

Molecular Weight of CIZ1: 134 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try CIZ1 (A-6): sc-393021 or CIZ1 (2186C2a): sc-81069, our highly recommended monoclonal alternatives to CIZ1 (F-17).