

CIZ1 (S-17): sc-107187

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

1. 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.
2. 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.
3. Coverley, D., Marr, J. and Ainscough, J. 2004. CIZ1 promotes mammalian DNA replication. *J. Cell Sci.* 118: 101-112.
4. Anachkova, B., Djeliova, V. and Russev, G. 2005. Nuclear matrix support of DNA replication. *J. Cell. Biochem.* 96: 951-961.
5. 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.
6. 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.
7. Rahman, F.A., Ainscough, J.F., Copeland, N. and Coverley, D. 2007. Cancer-associated missplicing of exon 4 influences the subnuclear distribution of the DNA replication factor CIZ1. *Hum. Mutat.* 28: 993-1004.

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107187 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CIZ1 (S-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), 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 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.

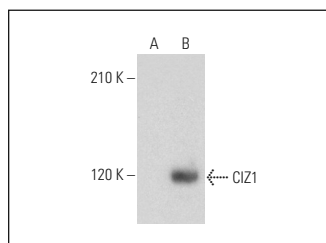
Molecular Weight of CIZ1: 134 kDa.

Positive Controls: CIZ1 (m): 293T Lysate: sc-126640.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

DATA



CIZ1 (S-17): sc-107187. Western blot analysis of CIZ1 expression in non-transfected: sc-117752 (A) and mouse CIZ1 transfected: sc-126640 (B) 293T whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

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