

ZCWCC1 (D-20): sc-65002

BACKGROUND

The CW domain is a structural module found in many vertebrate, parasitic and plant proteins. It consists of a mononuclear four-cysteine zinc finger domain that plays a role in DNA binding, chromatin methylation and early embryonic development. ZCWCC1 (zinc finger CW-type coiled-coil domain protein 1), also known as MORC2 (MORC family CW-type zinc finger protein 2) or ZCW3, is a 1,032 amino acid protein that contains one CW-type zinc finger domain. ZCWCC1 is located on chromosome 22 and is ubiquitously expressed with highest expression in pancreas, smooth muscle and testis. Expression of ZCWCC1 is upregulated in hypoxia, a pathological condition characterized by an inadequate supply of oxygen in the blood.

REFERENCES

- Dunham, I., Shimizu, N., Roe, B.A., Chissoe, S., Hunt, A.R., Collins, J.E., Bruskiewich, R., Beare, D.M., Clamp, M., Smink, L.J., Ainscough, R., Almeida, J.P., Babbage, A., Bagguley, C., Bailey, J., Barlow, K., Bates, K.N., Beasley, O., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
- Perry, J. and Zhao, Y. 2003. The CW domain, a structural module shared amongst vertebrates, vertebrate-infecting parasites and higher plants. *Trends Biochem. Sci.* 28: 576-580.
- Koklanaris, N., Nwachukwu, J.C., Huang, S.J., Guller, S., Karpisheva, K., Garabedian, M. and Lee, M.J. 2006. First-trimester trophoblast cell model gene response to hypoxia. *Am. J. Obstet. Gynecol.* 194: 687-693.
- Takahashi, K., Yoshida, N., Murakami, N., Kawata, K., Ishizaki, H., Tanaka-Okamoto, M., Miyoshi, J., Zinn, A.R., Shime, H. and Inoue, N. 2007. Dynamic regulation of p53 subnuclear localization and senescence by MORC3. *Mol. Biol. Cell* 18: 1701-1709.
- Liggins, A.P., Cooper, C.D., Lawrie, C.H., Brown, P.J., Collins, G.P., Hatton, C.S., Pulford, K. and Banham, A.H. 2007. MORC4, a novel member of the MORC family, is highly expressed in a subset of diffuse large B-cell lymphomas. *Br. J. Haematol.* 138: 479-486.
- LocusLink Report (LocusID: 22880). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: MORC2 (human) mapping to 22q12.2.

SOURCE

ZCWCC1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZCWCC1 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.

PROTOCOLS

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

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-65002 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZCWCC1 (D-20) is recommended for detection of ZCWCC1 of 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).

ZCWCC1 (D-20) is also recommended for detection of ZCWCC1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZCWCC1 siRNA (h): sc-63239, ZCWCC1 shRNA Plasmid (h): sc-63239-SH and ZCWCC1 shRNA (h) Lentiviral Particles: sc-63239-V.

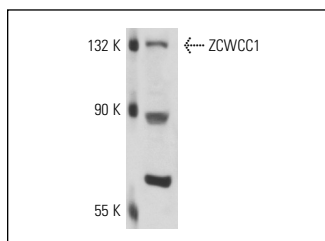
Molecular Weight of ZCWCC1: 118 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

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



ZCWCC1 (D-20): sc-65002. Western blot analysis of ZCWCC1 expression in IMR-32 nuclear extract.

RESEARCH USE

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