

# ZCCHC9 (D-12): sc-137951

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZCCHC9 (zinc finger, CCHC domain containing 9) is a 271 amino acid protein that contains four CCHC-type zinc finger, suggesting a role in transcriptional regulation. The gene encoding ZCCHC9 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

- Dixon, M.J., Read, A.P., Donnai, D., Colley, A., Dixon, J. and Williamson, R. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Saltman, D.L., Dolganov, G.M., Warrington, J.A., Wasmuth, J.J. and Lovett, M. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. *Genomics* 16: 726-732.
- Law, S.F., Zhang, Y.Z., Klein-Szanto, A.J. and Golemis, E.A. 1998. Cell cycle-regulated processing of HEF1 to multiple protein forms differentially targeted to multiple subcellular compartments. *Mol. Cell. Biol.* 18: 3540-3551.
- South, S.T., Swensen, J.J., Maxwell, T., Rope, A., Brothman, A.R. and Chen, Z. 2006. A new genomic mechanism leading to cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
- Du, H.Y., Idol, R., Robledo, S., Ivanovich, J., An, P., Londono-Vallejo, A., Wilson, D.B., Mason, P.J. and Bessler, M. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p-syndrome. *Aging Cell* 6: 689-697.

## CHROMOSOMAL LOCATION

Genetic locus: ZCCHC9 (human) mapping to 5q14.1; Zcchc9 (mouse) mapping to 13 C3.

## SOURCE

ZCCHC9 (D-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZCCHC9 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137951 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZCCHC9 (D-12) is recommended for detection of ZCCHC9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZCCHC family members.

Suitable for use as control antibody for ZCCHC9 siRNA (h): sc-91834, ZCCHC9 siRNA (m): sc-155485, ZCCHC9 shRNA Plasmid (h): sc-91834-SH, ZCCHC9 shRNA Plasmid (m): sc-155485-SH, ZCCHC9 shRNA (h) Lentiviral Particles: sc-91834-V and ZCCHC9 shRNA (m) Lentiviral Particles: sc-155485-V.

Molecular Weight of ZCCHC9: 30 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.