# Zic4 (C-20): sc-28159



The Power to Question

## **BACKGROUND**

Zic4 (zinc finger protein of the cerebellum 4) is a C2H2 zinc finger transcription factor that influences cerebellar development. Zic4 localizes to the nuclei of cerebellar granule cells. Zic4 mRNA expression peaks on postnatal day 5 in the developing cerebellum of mouse. Zic family members are important during development, and have been associated with X-linked visceral heterotaxy and holoprosencephaly type 5. Zic4 is closely linked to Zic1, a related family member on chromosome 3.

## **REFERENCES**

- 1. Aruga, J., et al. 1996. Identification and characterization of Zic4, a new member of the mouse Zic gene family. Gene. 172: 291-294.
- Nagai, T., et al. 1997. The expression of the mouse Zic1, Zic2, and Zic3 gene suggests an essential role for Zic genes in body pattern formation. Dev Biol 182: 299-313.
- Ogura, H., et al. 2001. Behavioral abnormalities of Zic1 and Zic2 mutant mice: implications as models for human neurological disorders. Behav. Genet. 31: 317-324.
- Salero, E., et al. 2001. Transcription factors Zic1 and Zic2 bind and transactivate the apolipoprotein E gene promoter. J. Biol. Chem. 276: 1881-1888.
- Ebert, P.J., et al. 2003. Zic1 represses Math1 expression via interactions with the Math1 enhancer and modulation of Math1 autoregulation. Development 130: 1949-1959.
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- 7. LocusLink Report (LocusID: 84107). http://www.ncbi.nlm.nih.gov/LocusLink/
- 8. http://harvester.embl.de/harvester/Q8N9/Q8N9L1.htm

## **CHROMOSOMAL LOCATION**

Genetic locus: ZIC4 (human) mapping to 3q24.

# **SOURCE**

Zic4 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Zic4 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28159 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28159 X, 200  $\mu g/0.1$  ml.

# **STORAGE**

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

#### **APPLICATIONS**

Zic4 (C-20) is recommended for detection of Zic4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for Zic4 siRNA (h): sc-106712, Zic4 shRNA Plasmid (h): sc-106712-SH and Zic4 shRNA (h) Lentiviral Particles: sc-106712-V.

Zic4 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

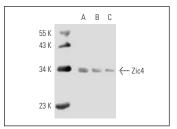
Molecular Weight of Zic4: 34 kDa.

Positive Controls: SK-N-MC nuclear extract: sc-2154, HeLa nuclear extract: sc-2120 or THP-1 nuclear extract: sc-24963.

## **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



Zic4 (C-20): sc-28159. Western blot analysis of Zic4 expression in SK-N-MC (**A**), HeLa (**B**) and THP-1 (**C**) nuclear extracts.

#### **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.