



## Zic4 (L-14): sc-28158

### 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.
2. 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.
3. 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.
4. Salero, E., et al. 2001. Transcription factors Zic1 and Zic2 bind and transactivate the apolipoprotein E gene promoter. *J. Biol. Chem.* 276: 1881-1888.
5. 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.
6. Grinberg, I., et al. 2004. Heterozygous deletion of the linked genes ZIC1 and ZIC4 is involved in Dandy-Walker malformation. *Nat Genet* 36: 1053-1055.
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 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Zic4 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-28158 P, (100 µg 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-28158 X, 200 µg/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 (L-14) is recommended for detection of Zic4 of 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 Zic4 siRNA (h): sc-106712, Zic4 shRNA Plasmid (h): sc-106712-SH and Zic4 shRNA (h) Lentiviral Particles: sc-106712-V.

Zic4 (L-14) 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) 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.

### 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.