SANTA CRUZ BIOTECHNOLOGY, INC.

Zic4 (G-14): sc-28160

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: 1 053-1055.
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 (mouse) mapping to 9 E3.3.

SOURCE

Zic4 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Zic4 of mouse 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-28160 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-28160 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 (G-14) is recommended for detection of Zic4 of mouse and rat 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 (m): sc-155611, Zic4 shRNA Plasmid (m): sc-155611-SH and Zic4 shRNA (m) Lentiviral Particles: sc-155611-V.

Zic4 (G-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Zic4: 34 kDa.

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 or our catalog for detailed protocols and support products.