

# Zic5 (A-18): sc-28163

## BACKGROUND

Zic5 (zinc finger protein of the cerebellum 5) is a C<sub>2</sub>H<sub>2</sub> zinc finger transcription factor that influences development of the neural crest. Zic family members are abundant in developing and adult cerebellum. Zic family members are important during development, and have been associated with X-linked visceral heterotaxy and holoprosencephaly type 5. Zic5 is closely linked to Zic2, a related family member on chromosome 13.

## REFERENCES

- 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.
- Nakata, K., et al. 2000. A novel member of the Xenopus Zic family, Zic5, mediates neural crest development. *Mech. Dev.* 99: 83-91.
- 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.
- 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.
- 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.
- LocusLink Report (LocusID: 85416). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: ZIC5 (human) mapping to 13q32.3; Zic5 (mouse) mapping to 14 E5.

## SOURCE

Zic5 (A-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Zic5 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-28163 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-28163 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

Zic5 (A-18) is recommended for detection of Zic5 of mouse, rat and 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).

Zic5 (A-18) is also recommended for detection of Zic5 in additional species, including canine and porcine.

Suitable for use as control antibody for Zic5 siRNA (h): sc-106874, Zic5 siRNA (m): sc-155612, Zic5 shRNA Plasmid (h): sc-106874-SH, Zic5 shRNA Plasmid (m): sc-155612-SH, Zic5 shRNA (h) Lentiviral Particles: sc-106874-V and Zic5 shRNA (m) Lentiviral Particles: sc-155612-V.

Zic5 (A-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

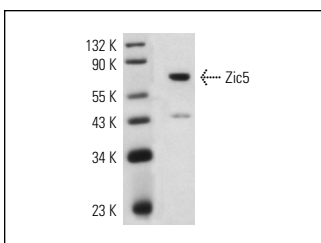
Molecular weight of Zic5: 72 kDa.

Positive Controls: mouse brain extract: sc-2253.

## 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



Zic5 (A-18): sc-28163. Western blot analysis of Zic5 expression in mouse brain tissue extract.

## SELECT PRODUCT CITATIONS

- Gossman, D.G., et al. 2008. Hemichannel-mediated inositol 1,4,5-trisphosphate (IP3) release in the cochlea: a novel mechanism of IP3 intercellular signaling. *Cell Commun. Adhes.* 15: 305-315.

## RESEARCH USE

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