

# Zic3 (N-19): sc-28154

## BACKGROUND

Zic3 (zinc finger protein of the cerebellum 3) is a C<sub>2</sub>H<sub>2</sub> zinc finger transcription factor that establishes a proper left-right axis and midline neural patterning during early development of the vertebrate embryo. Mutations in this gene cause X-linked visceral heterotaxy, which includes congenital heart disease and left-right axis defects in organs. Zic3 mutations in the zinc finger DNA binding domain and in the N-terminal domain result in loss of reporter gene transactivation, and mutations between amino acids 253-323 of the Zic3 protein causes aberrant cytoplasmic localization rather than the wild type nuclear localization.

## CHROMOSOMAL LOCATION

Genetic locus: ZIC3 (human) mapping to Xq26.3; Zic3 (mouse) mapping to X A6.

## SOURCE

Zic3 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Zic3 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-28154 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-28154 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

Zic3 (N-19) is recommended for detection of Zic3 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).

Suitable for use as control antibody for Zic3 siRNA (h): sc-106711, Zic3 siRNA (m): sc-155610, Zic3 shRNA Plasmid (h): sc-106711-SH, Zic3 shRNA Plasmid (m): sc-155610-SH, Zic3 shRNA (h) Lentiviral Particles: sc-106711-V and Zic3 shRNA (m) Lentiviral Particles: sc-155610-V.

Zic3 (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

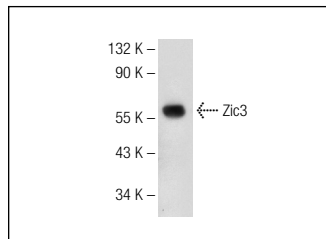
Molecular Weight of Zic3: 56 kDa.

Positive Controls: Rat2 whole cell lysate: sc-364198, NIH/3T3 whole cell lysate: sc-2210 or Y79 cell lysate: sc-2240.

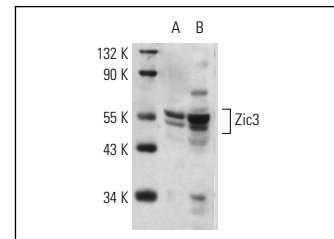
## RECOMMENDED SECONDARY REAGENTS

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



Zic3 (N-19): sc-28154. Western blot analysis of Zic3 expression in Y79 whole cell lysate.



Zic3 (N-19): sc-28154. Western blot analysis of Zic3 expression in NIH/3T3 (A) and Rat2 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Bedard, J.E., et al. 2011. Identification of a novel ZIC3 isoform and mutation screening in patients with heterotaxy and congenital heart disease. PLoS ONE 6: e23755.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **Zic3 (S0-15): sc-101201**, our highly recommended monoclonal alternative to Zic3 (N-19).