SANTA CRUZ BIOTECHNOLOGY, INC.

TSHZ2 (C-15): sc-85977



BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. TSHZ2 (teashirt homolog 2), also known as ZNF218 (zinc finger protein 218) and OVC10-2 (ovarian cancer-related protein 10-2), is a 1,034 amino acid nuclear protein that contains one homeobox DNA-binding domain, as well as 5 C_2H_2 -type zinc fingers. In *Drosophilia*, teashirt genes function as region-specific homeotic genes that specify trunk identity during embryogenesis and these genes seem to conserve the same function in mice. The gene encoding TSHZ2 maps to human chromosome 20, which comprises approximately 2% of the human genome and contains nearly 63 million bases that encode over 600 genes.

REFERENCES

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- Manfroid, I., et al. 2004. Three putative murine teashirt orthologues specify trunk structures in *Drosophila* in the same way as the *Drosophila* teashirt gene. Development 131: 1065-1073.
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- 8. Santos, J.S., et al. 2010. Phylogeny of the teashirt-related zinc finger (TSHZ) gene family and analysis of the developmental expression of TSHZ2 and TSHZ3b in the zebrafish. Dev. Dyn. 239: 1010-1018.
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CHROMOSOMAL LOCATION

Genetic locus: TSHZ2 (human) mapping to 20q13.2; Tshz2 (mouse) mapping to 2 H3.

SOURCE

TSHZ2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TSHZ2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85977 P, (100 μ 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-85977 X, 100 $\mu g/0.1$ ml.

APPLICATIONS

TSHZ2 (C-15) is recommended for detection of TSHZ2 of mouse, rat and 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); non cross-reactive with TSHZ1 and TSHZ3.

TSHZ2 (C-15) is also recommended for detection of TSHZ2 in additional species, including canine and bovine.

Suitable for use as control antibody for TSHZ2 siRNA (h): sc-76763, TSHZ2 siRNA (m): sc-154720, TSHZ2 shRNA Plasmid (h): sc-76763-SH, TSHZ2 shRNA Plasmid (m): sc-154720-SH, TSHZ2 shRNA (h) Lentiviral Particles: sc-76763-V and TSHZ2 shRNA (m) Lentiviral Particles: sc-154720-V.

TSHZ2 (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TSHZ2: 115 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) Immunofluo-rescence: 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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.