### SANTA CRUZ BIOTECHNOLOGY, INC.

# SRY (N-19)-R: sc-8232-R



#### BACKGROUND

SRY (sex-determining region Y protein) is a transcriptional activator required for male sex determination in mammals. This protein, also referred to as testisdetermining factor (TDF), is an HMG box protein that initiates the formation of testis from undifferentiated gonad. The DNA-binding activity of SRY is required for normal testis formation. This DNA-binding activity is thought to be regulated by PKA, which phosphorylates SRY *in vivo*. Mutations in SRY have been associated with 46,XY gonadal dysgenesis, in which the gonads fail to develop in XY phenotypic females.

#### REFERENCES

- 1. Clepet, C., et al. 1993. The human SRY transcript. Hum. Mol. Genet. 2: 2007-2012.
- 2. Harley, V.R., et al. 1994. The biochemical role of SRY in sex determination. Mol. Reprod. Dev. 39: 184-193.
- Fechner, P.Y. 1996. The role of SRY in mammalian sex determination. Acta Paediatr. Jpn. 38: 380-389.
- Tsutsumi, O., et al. 1996. Analysis of the testis-determining gene SRY in patients with gonadal dysgenesis. Horm. Res. 46: 6-10.
- 5. Graves, J.A. 1998. Evolution of the mammalian Y chromosome and sex-determining genes. J. Exp. Zool. 281: 472-481.
- Desclozeaux, M., et al. 1998. Phosphorylation of an N-terminal motif enhances DNA-binding activity of the human SRY protein. J. Biol. Chem. 273: 7988-7995.
- 7. Forwood, J.K., et al. 2001. The C-terminal nuclear localization signal of the sex-determining region Y (SRY) high mobility group domain mediates nuclear import through importin  $\beta$  1. J. Biol. Chem. 276: 46575-46582.
- Baud, S., et al. 2002. Equilibrium binding assays reveal the elevated stoichiometry and salt dependence of the interaction between full-length human sex-determining region on the Y chromosome (SRY) and DNA. J. Biol. Chem. 277: 18404-18410.

#### CHROMOSOMAL LOCATION

Genetic locus: SRY (human) mapping to Yp11.31.

#### SOURCE

SRY (N-19)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of SRY of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8232 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-8232 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

#### **APPLICATIONS**

SRY (N-19)-R is recommended for detection of SRY 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 SRY siRNA (h): sc-38443, SRY shRNA Plasmid (h): sc-38443-SH and SRY shRNA (h) Lentiviral Particles: sc-38443-V.

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

Molecular Weight of SRY: 27 kDa.

Positive Controls: human testis extract: sc-363781 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### **STORAGE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

## MONOS Satisfation Guaranteed

Try SRY (SRY-15): sc-69842 or SRY (H-1): sc-374224, our highly recommended monoclonal alternatives to SRY (N-19).