SANTA CRUZ BIOTECHNOLOGY, INC.

SRY (E-19): sc-8233

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SRY (sex-determining region Y protein) is a transcriptional activator required for male sex determination in mammals. This protein, also referred to as testis-determining 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.
3. Fechner, P.Y. 1996. The role of SRY in mammalian sex determination. Acta Paediatr. Jpn. 38: 380-389.
4. 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.

CHROMOSOMAL LOCATION

Genetic locus: Sry (mouse) mapping to Y A1.

SOURCE

SRY (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SRY 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8233 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-8233 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SRY (E-19) is recommended for detection of SRY and SOX family proteins of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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

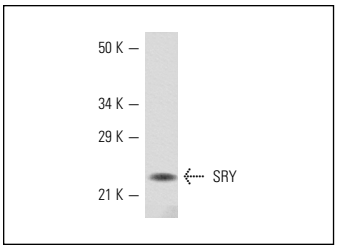
Molecular Weight of SRY: 27 kDa.

Positive Controls: mouse testis extract: sc-2405.

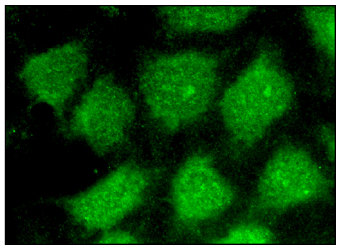
RECOMMENDED SECONDARY REAGENTS

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.

DATA



SRY (E-19): sc-8233. Western blot analysis of SRY expression in mouse testis tissue extract.



SRY (E-19): sc-8233. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Yu, X., et al. 2000. Characterization of the promoter of human leukocyte-specific transcript 1. A small gene with a complex pattern of alternative transcripts. J. Biol. Chem. 275: 34597-34608.
2. Yeh, Y.C., et al. 2005. Stage-dependent expression of extra-embryonic tissue-spermatogenesis-homeobox gene 1 (ESX1) protein, a candidate marker for X chromosome-bearing sperm. Reprod. Fertil. Dev. 17: 447-455.
3. Yannaki, E., et al. 2005. G-CSF-primed hematopoietic stem cells or G-CSF *per se* accelerate recovery and improve survival after liver injury, predominantly by promoting endogenous repair programs. Exp. Hematol. 33: 108-119.
4. Bradford, S.T., et al. 2007. Comparative analysis of anti-mouse SRY antibodies. Sex. Dev. 1: 305-310.
5. Wang, J., et al. 2015. Bone mesenchymal stem cells overexpressing FGF4 contribute to liver regeneration in an animal model of liver cirrhosis. Int. J. Clin. Exp. Med. 8: 12774-12782.

RESEARCH USE

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