

SRY (H-1): sc-374224

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

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- Harley, V.R., et al. 1994. The biochemical role of SRY in sex determination. *Mol. Reprod. Dev.* 39: 184-193.
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- 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.
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- 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.
- Morrison, L.S., et al. 2003. Thimet oligopeptidase expression is differentially regulated in neuroendocrine and spermatid cell lines by transcription factor binding to SRY (sex-determining region Y), CAAT and CREB (cAMP-response-element-binding protein) promoter consensus sequences. *Biochem. J.* 376: 189-197.

CHROMOSOMAL LOCATION

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

SOURCE

SRY (H-1) is a mouse monoclonal antibody raised against amino acids 1-60 mapping at the N-terminus of SRY of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain 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-374224 X, 200 μ g/0.1 ml.

APPLICATIONS

SRY (H-1) is recommended for detection of SRY of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 SRY siRNA (h): sc-38443, SRY shRNA Plasmid (h): sc-38443-SH and SRY shRNA (h) Lentiviral Particles: sc-38443-V.

SRY (H-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

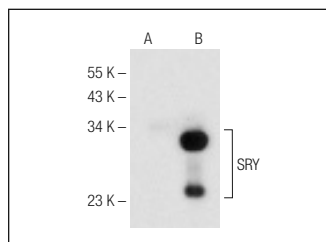
Molecular Weight of SRY: 27 kDa.

Positive Controls: human testis extract: sc-363781, NTERA-2 cl.D1 whole cell lysate: sc-364181 or human SRY transfected HEK293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



SRY (H-1): sc-374224. Western blot analysis of SRY expression in non-transfected (A) and human SRY transfected (B) HEK293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Olivares, A., et al. 2018. Regulation of CATSPER1 expression by the testis-determining gene SRY. *PLoS ONE* 13: e0205744.

STORAGE

Store at 4° C, ****DO 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.