

SRY (SRY-15): sc-69842

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. and Goodfellow, P.N. 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. 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.
6. Graves, J.A. 1998. Evolution of the mammalian Y chromosome and sex-determining genes. *J. Exp. Zool.* 281: 472-481.
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 β 1. *J. Biol. Chem.* 276: 46575-46582.

CHROMOSOMAL LOCATION

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

SOURCE

SRY (SRY-15) is a mouse monoclonal antibody raised against recombinant partial length SRY of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SRY (SRY-15) is available conjugated to agarose (sc-69842 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-69842 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-69842 PE), fluorescein (sc-69842 FITC), Alexa Fluor[®] 488 (sc-69842 AF488), Alexa Fluor[®] 546 (sc-69842 AF546), Alexa Fluor[®] 594 (sc-69842 AF594) or Alexa Fluor[®] 647 (sc-69842 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-69842 AF680) or Alexa Fluor[®] 790 (sc-69842 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SRY (SRY-15) is recommended for detection of SRY of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

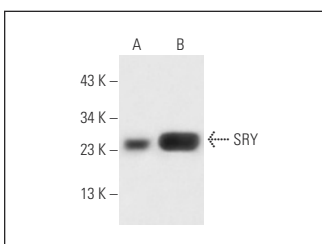
Molecular Weight of SRY: 27 kDa.

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

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 (SRY-15): sc-69842. Western blot analysis of SRY expression in human testis tissue extract (A) and NTERA-2 cl.D1 whole cell lysate (B).

SELECT PRODUCT CITATIONS

1. Wu, J.B., et al. 2009. Regulation of monoamine oxidase A by the SRY gene on the Y chromosome. *FASEB J.* 23: 4029-4038.

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.