



▶ LOC646395 (C-20): sc-83893

BACKGROUND

Human gender is determined by the sex chromosomes X and Y. Pairing two X chromosomes during fertilization leads to female development, and the pairing of an X with a Y chromosome leads to male development. The Y chromosome is the human sex determining chromosome, necessary for male development. Deletion or defect of any gene residing on the Y chromosome is not lethal, however it would impair masculine development and function. Carrying an additional copy of the Y chromosome, as in males with XYY Syndrome, does not lead to an obvious phenotype and most XYY males are unaware of their additional Y chromosome. The Y chromosome contains about 86 genes encoded within approximately 58 million base pairs. The LOC646395 gene product has been provisionally designated LOC646395 pending further characterization.

REFERENCES

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3. Koopman, P. 1999. SRY and Sox-9: mammalian testis-determining genes. *Cell. Mol. Life Sci.* 55: 839-856.
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5. Graves, J.A. 2006. Sex chromosome specialization and degeneration in mammals. *Cell* 124: 901-914.
6. Krausz, C. and Giachini, C. 2007. Genetic risk factors in male infertility. *Arch. Androl.* 53: 125-133.
7. Lefebvre, V., Dumitriu, B., Penzo-Méndez, A., Han, Y. and Pallavi, B. 2007. Control of cell fate and differentiation by SRY-related high-mobility-group box (Sox) transcription factors. *Int. J. Biochem. Cell Biol.* 39: 2195-2214.
8. Waters, P.D., Wallis, M.C. and Marshall Graves, J.A. 2007. Mammalian sex—Origin and evolution of the Y chromosome and SRY. *Semin. Cell Dev. Biol.* 18: 389-400.
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CHROMOSOMAL LOCATION

Genetic locus: (human) mapping to Yp11.2.

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.

SOURCE

LOC646395 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of LOC646395 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83893 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LOC646395 (C-20) is recommended for detection of LOC646395 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).

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: 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™ Mounting Medium: sc-24941.

RESEARCH USE

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