



CYorf15A (C-20): sc-83872

BACKGROUND

CYorf15A (chromosome Y open reading frame 15A) is a 182 amino acid protein that is ubiquitously expressed and is encoded by a gene which maps to human chromosome Y. Chromosome Y contains approximately 58 million base pairs and houses over 80 genes, many of which are essential for proper sexual development. The Y chromosome is the human sex determining chromosome, necessary for male development and, while deletions or defects in chromosome Y-encoded genes are not lethal, they may greatly impair masculine development and function. Carrying an additional copy of the Y chromosome, as seen in males with XYY syndrome, does not lead to an obvious phenotype and most XYY males are unaware of their additional Y chromosome.

REFERENCES

1. Vilain, E. and McCabe, E.R. 1998. Mammalian sex determination: from gonads to brain. *Mol. Genet. Metab.* 65: 74-84.
2. Delbridge, M.L. and Graves J.A. 1999. Mammalian Y chromosome evolution and the male-specific functions of Y chromosome-borne genes. *Rev. Reprod.* 4: 101-109.
3. Graves, J.A. 2001. From brain determination to testis determination: evolution of the mammalian sex-determining gene. *Reprod. Fertil. Dev.* 13: 665-672.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 400031. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Skaletsky, H., Kuroda-Kawaguchi, T., Minx, P.J., Cordum, H.S., Hillier, L., Brown, L.G., Repping, S., Pyntikova, T., Ali, J., Bieri, T., Chinwalla, A., Delehaanty, A., Delehaanty, K., Du, H., Fewell, G., Fulton, L., Fulton, R., Graves, T., Hou, S.F., Latrielle, P., Leonard, S., Mardis, E., Maupin, R., McPherson, J., Miner, T., Nash, W., Nguyen, C., Ozersky, P., Pepin, K., Rock, S., Rohlffing, T., Scott, K., Schultz, B., Strong, C., Tin-Wollam, A., Yang, S.P., Waterston, R.H., Wilson, R.K., Rozen, S. and Page, D.C. 2003. The male-specific region of the human Y chromosome is a mosaic of discrete sequence classes. *Nature* 423: 825-837.
6. Graves, J.A. 2006. Sex chromosome specialization and degeneration in mammals. *Cell* 124: 901-914.
7. Krausz, C. and Giachini, C. 2007. Genetic risk factors in male infertility. *Arch. Androl.* 53: 125-133.
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.
9. Wilhelm, D., Palmer, S. and Koopman, P. 2007. Sex determination and gonadal development in mammals. *Physiol. Rev.* 87: 1-28.

CHROMOSOMAL LOCATION

Genetic locus: CYorf15A (human) mapping to Yq11.222.

SOURCE

CYorf15A (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of CYorf15A 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-83872 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CYorf15A (C-20) is recommended for detection of CYorf15A 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); non cross-reactive with CYorf15B.

Suitable for use as control antibody for CYorf15A siRNA (h): sc-91545, CYorf15A shRNA Plasmid (h): sc-91545-SH and CYorf15A shRNA (h) Lentiviral Particles: sc-91545-V.

Molecular Weight of CYorf15A: 21 kDa

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.

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.

PROTOCOLS

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