

# LOC728165 (N-14): sc-84971

## BACKGROUND

Human gender is determined by the sex chromosomes X and Y. Pairing of 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 LOC728165 gene product has been provisionally designated LOC728165 pending further characterization.

## REFERENCES

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- Graves, J.A. 2001. From brain determination to testis determination: evolution of the mammalian sex-determining gene. *Reprod. Fertil. Dev.* 13: 665-672.
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- 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.
- Wilhelm, D., Palmer, S. and Koopman, P. 2007. Sex determination and gonadal development in mammals. *Physiol. Rev.* 87: 1-28.

## SOURCE

LOC728165 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of LOC728165 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-84971 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LOC728165 (N-14) is recommended for detection of LOC728165 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); may cross-react with other hypothetical proteins.

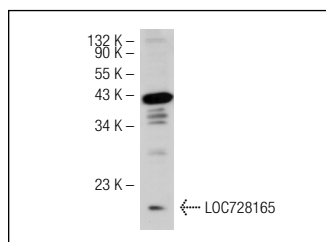
Molecular Weight of LOC728165: 28 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



LOC728165 (N-14): sc-84971. Western blot analysis of LOC728165 expression in K-562 whole cell lysate.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.