



NYD-SP15 (Y-19): sc-84544

BACKGROUND

NYD-SP15 (testis development protein NYD-SP15), also known as CDADC1 (cytidine and dCMP deaminase domain containing 1), is a widely expressed protein with predominant expression in the testis, liver, spleen, kidney, thymus and placenta. NYD-SP15 is 514 amino acids in length and belongs to the cytidine and deoxycytidylate deaminase family. It is developmentally regulated, with higher expression in adult testis than fetal testis, and is believed to participate in spermatogenesis and testicular development. This suggests that NYD-SP15 may be a determining factor in male infertility. Due to alternative splicing events, four transcript variants exist for NYD-SP15.

REFERENCES

1. Tiazhelova, T.V., Ivanov, D.V., Nazarenko, S.A., Baranova, A.V. and Iankovskii, N.K. 2004. Search for transcribed segments in the region of q14.3 of human chromosome 13 in silico. *Genetika* 40: 422-426.
2. Toshimitsu, H., Iizuka, N., Yamamoto, K., Kawauchi, S., Oga, A., Furuya, T., Oka, M. and Sasaki, K. 2006. Molecular features linked to the growth-inhibitory effects of gemcitabine on human pancreatic cancer cells. *Oncol. Rep.* 16: 1285-1291.
3. Liu, Q., Liu, J., Cao, Q., Sha, J., Zhou, Z., Wang, H. and Li, J. 2006. NYD-SP15: a novel gene potentially involved in regulating testicular development and spermatogenesis. *Biochem. Genet.* 44: 409-423.
4. Kumagai, T., Tomari, K., Shimizu, T. and Takeda, K. 2006. Alteration of gene expression in response to bone morphogenetic protein-2 in androgen-dependent human prostate cancer LNCaP cells. *Int. J. Mol. Med.* 17: 285-291.

CHROMOSOMAL LOCATION

Genetic locus: CDADC1 (human) mapping to 13q14.2; Cdadc1 (mouse) mapping to 14 D1.

SOURCE

NYD-SP15 (Y-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NYD-SP15 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-84544 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

NYD-SP15 (Y-19) is recommended for detection of NYD-SP15 of mouse and 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 all isoforms.

Suitable for use as control antibody for NYD-SP15 siRNA (h): sc-75986, NYD-SP15 siRNA (m): sc-150136, NYD-SP15 shRNA Plasmid (h): sc-75986-SH, NYD-SP15 shRNA Plasmid (m): sc-150136-SH, NYD-SP15 shRNA (h) Lentiviral Particles: sc-75986-V and NYD-SP15 shRNA (m) Lentiviral Particles: sc-150136-V.

Molecular Weight of NYD-SP15: 58 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

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.