

# CDY (C-16): sc-28468

## BACKGROUND

CDY, a gene family expressed exclusively in the testis, localizes to a region of the Y chromosome frequently deleted in infertile males. CDY protein contains two functional domains, an N-terminal chromodomain, possibly functioning in heterochromatin interactions, and a C-terminal domain which resembles enoyl-CoA-isomerase, a protein involved in fatty acid oxidation. Furthermore, CDY acts as a histone acetyltransferase, with strong preference for Histone H4, a process required for the histone to proamine transition in spermatogenesis, consistent with the association with male infertility.

## REFERENCES

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- Wimmer, R., Kuhl, H., Rottger, S. and Schempp, W. 2002. Comparative mapping of CDY and DAZ in higher primates. *Cytogenet. Genome Res.* 96: 287-289.
- Kostova, E., Rottger, S., Schempp, W. and Gromoll, J. 2002. Identification and characterization of the cynomolgus monkey chromodomain gene *cynCDY*, an orthologue of the human CDY gene family. *Mol. Hum. Reprod.* 8: 702-709.
- Kleiman, S.E., Yogev, L., Hauser, R., Botchan, A., Bar-Shira Maymon, B., Schreiber, L., Paz, G. and Yavetz, H. 2003. Members of the CDY family have different expression patterns: CDY1 transcripts have the best correlation with complete spermatogenesis. *Hum. Genet.* 113: 486-492.
- Dorus, S., Gilbert, S.L., Forster, M.L., Barndt, R.J. and Lahn, B.T. 2003. The CDY-related gene family: coordinated evolution in copy number, expression profile and protein sequence. *Hum. Mol. Genet.* 12: 1643-1650.

## SOURCE

CDY (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CDY of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28468 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

CDY (C-16) is recommended for detection of CDY and CDYL of mouse, rat and 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).

CDY (C-16) is also recommended for detection of CDY and CDYL in additional species, including equine, canine, bovine and porcine.

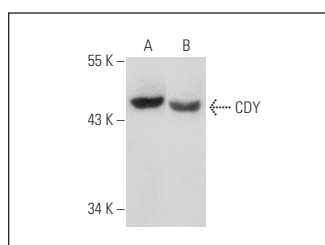
Molecular Weight of CDY: 60 kDa.

Positive Controls: rat testis extract: sc-2400, mouse testis extract: sc-2405 or F9 cell lysate: sc-2245.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CDY (C-16): sc-28468. Western blot analysis of CDY expression in F9 (A) and AMJ2-C11 (B) whole cell lysates.

## RESEARCH USE

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