CDYL (h): 293T Lysate: sc-112015



The Power to Question

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 also 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. Chromodomain Y-like protein (CDYL) is a related ubiquitous nuclear protein expressed at moderate levels in most tissues. The gene encoding for the CDYL protein localizes to chromosome 6p25.1.

REFERENCES

- Lahn, B.T. and Page, D.C. 1999. Retroposition of autosomal mRNA yielded testis-specific gene family on human Y chromosome. Nat. Genet. 21: 429-433.
- Wimmer, R., Kühl, H., Röttger, S. and Schempp, W. 2002. Comparative mapping of CDY and DAZ in higher primates. Cytogenet. Genome Res. 96: 287-289.
- Lahn, B.T., Tang, Z.L., Zhou, J., Barndt, R.J., Parvinen, M., Allis, C.D. and Page, D.C. 2002. Previously uncharacterized histone acetyltransferases implicated in mammalian spermatogenesis. Proc. Natl. Acad. Sci. USA 99: 8707-8712.
- Kostova, E., Röttger, 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.

CHROMOSOMAL LOCATION

Genetic locus: CDYL (human) mapping to 6p25.1.

PRODUCT

CDYL (h): 293T Lysate represents a lysate of human CDYL transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

CDYL (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CDYL antibodies. Recommended use: 10-20 µl per lane.

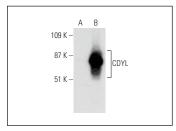
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CDYL (E-8): sc-515793 is recommended as a positive control antibody for Western Blot analysis of enhanced human CDYL expression in CDYL transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CDYL (E-8): sc-515793. Western blot analysis of CDYL expression in non-transfected: sc-117752 (A) and human CDYL transfected: sc-112015 (B) 293T whole rell lysates

PROTOCOLS

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