



CDP (h): 293T Lysate: sc-117216

BACKGROUND

CDP (for CCAAT displacement protein) has been identified as a repressor for transcription of developmentally regulated genes. It is a homeodomain protein that appears to compete with transcriptional activating proteins for binding to the promoter regions of various genes. CDP contains three CUT repeats which function as DNA binding domains. It has been demonstrated that CUT repeat domains have the capacity to bind to DNA in conjunction with or independently of homeodomain DNA binding. CDP has been shown to be the DNA-binding subunit of the HiNF-D complex, which contains cyclin A, Cdc2 and an Rb-related protein, in addition to CDP. Histone expression is required for the transition to S phase in the cell cycle. The HiNF-D complex regulates the transcription of Histone H4, H3 and H1 genes, allowing cells to progress from G₁/S phase.

REFERENCES

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7. Seto, H., et al. 2006. Antagonistic regulation of the *Drosophila* PCNA gene promoter by DREF and CUT. Genes Cells 11: 499-512.
8. Maitra, U., et al. 2006. Differentiation-induced cleavage of CUT11/CDP generates a novel dominant-negative isoform that regulates mammary gene expression. Mol. Cell. Biol. 26: 7466-7478.
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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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: CUX1 (human) mapping to 7q22.1.

PRODUCT

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

APPLICATIONS

CDP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CDP 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.

RESEARCH USE

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