



CREG (h): 293 Lysate: sc-110944

BACKGROUND

The adenovirus E1A protein both activates and represses gene expression to promote cellular proliferation and inhibit differentiation. CREG (cellular repressor of E1A-stimulated genes) is a cellular protein that antagonizes transcriptional activation and cellular transformation by E1A. CREG was initially isolated in a yeast two-hybrid screen due to its interaction with the TATA-binding protein, TBP. Binding sites for E2F, a key transcriptional regulator of cell cycle progression, are required for repression of the adenovirus E2 promoter by CREG, and CREG was shown to inhibit activation by E2F. CREG is broadly expressed in adult tissues and is regulated during embryonic development. CREG is a secreted glycoprotein which enhances differentiation of mouse embryonic stem cells and human NTERA-2 cells. CREG activity may contribute to the transcriptional control of cell growth and differentiation.

REFERENCES

1. Whyte, P., Williamson, N.M. and Harlow, E. 1989. Cellular targets for transformation by the adenovirus E1A proteins. *Cell* 56: 67-75.
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3. Weintraub, S.J., Chow, K.N., Luo, R.X., Zhang, S.H., He, S. and Dean, D.C. 1995. Mechanism of active transcriptional repression by the retinoblastoma protein. *Nature* 375: 812-815.
4. Veal, E., Eisenstein, M., Tseng, Z.H. and Gill, G. 1998. A cellular repressor of E1A-stimulated genes that inhibits activation by E2F. *Mol. Cell. Biol.* 18: 5032-5041.
5. Veal, E., Groisman, R., Eisenstein, M. and Gill, G. 2000. The secreted glycoprotein CREG enhances differentiation of NTERA-2 human embryonal carcinoma cells. *Oncogene* 19: 2120-2128.

CHROMOSOMAL LOCATION

Genetic locus: CREG1 (human) mapping to 1q24.2.

PRODUCT

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

APPLICATIONS

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

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

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.

PROTOCOLS

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