SANTA CRUZ BIOTECHNOLOGY, INC.

# CREG (G-15): sc-11729

## 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.
2. Stein, R.W., Corrigan,M., Yaciuk, P. Whelan, J. and Moran, E. 1990. Analysis of E1A-mediated growth regulation functions: binding of the 300-kilodalton cellular product correlates with E1A enhancer repression function and DNA synthesis-inducing activity. J. Virol. 64: 4421-4427.
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.


## SOURCE

CREG (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CREG of mouse 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-11729 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

CREG (G-15) is recommended for detection of CREG of mouse and rat 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).

Suitable for use as control antibody for CREG siRNA (m): sc-142565, CREG shRNA Plasmid (m): sc-142565-SH and CREG shRNA (m) Lentiviral Particles: sc-142565-V.

## 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) 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.

## RESEARCH USE

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