## SANTA CRUZ BIOTECHNOLOGY, INC.

# p130 (C-20): sc-317



#### BACKGROUND

The human retinoblastoma gene product Rb plays an important role in the negative regulation of cell proliferation. The Rb family includes p107 and p130, which form complexes with E2F proteins, and share a high degree of structural homology in the adenovirus E1A binding domain (i.e., "pocket region"), which plays a primary role in the function of these proteins. The Rb family members undergo cell cycle dependent phosphorylation during mid- $G_1$  to S phase transition, which is dependent upon the activity of cyclin D/Cdk4. In contrast to pRb and p107, p130 is also phosphorylated during  $G_0$  and the early  $G_1$  phase of the cell cycle. p130 is specifically phosphorylated on serine and threonine residues in cells arrested in  $G_0$  by serum deprivation or density arrest, and these residues are clustered within a short co-linear region unique to p130 defined as the Loop.

## CHROMOSOMAL LOCATION

Genetic locus: RBL2 (human) mapping to 16q12.2; Rbl2 (mouse) mapping to 8 C5.

#### SOURCE

p130 (C-20) is available as either rabbit (sc-317) or goat (sc-317-G) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of p130 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-317 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-317 AC, 500  $\mu$ g/0.25 ml agarose in 1 ml; and as TransCruz reagent for Gel Supershift and ChIP applications, sc-317 X, 200  $\mu$ g/0.1 ml.

#### APPLICATIONS

p130 (C-20) is recommended for detection of p130 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). p130 (C-20) is also recommended for detection of p130 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for p130 siRNA (h): sc-29425, p130 siRNA (m): sc-29426, p130 shRNA Plasmid (h): sc-29425-SH, p130 shRNA Plasmid (m): sc-29426-SH, p130 shRNA (h) Lentiviral Particles: sc-29425-V and p130 shRNA (m) Lentiviral Particles: sc-29426-V.

Molecular Weight of p130: 130 kDa.

#### **RESEARCH USE**

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

#### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA





p130 (C-20)-G: sc-317-G. Western blot analysis of p130 expression in untreated (A) and phorbol ester-treated (B) Jurkat whole cell lysates and C32 nuclear extract (C).

p130 (C-20): sc-317. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human vulva/anal skin tissue showing nuclear staining of epidermal cells (**B**).

#### SELECT PRODUCT CITATIONS

- Liu, N., et al. 1997. CDF-1, a novel E2F-unrelated factor, interacts with cell cycle-regulated repressor elements in multiple promoters. Nucleic Acids Res. 25: 4915-4920.
- Hauser, S., et al. 2011. Loss of LIN9, a member of the DREAM complex, cooperates with SV40 large T antigen to induce genomic instability and anchorage-independent growth. Oncogene 31: 1859-1868.
- Moiseeva, O., et al. 2011. Retinoblastoma-independent regulation of cell proliferation and senescence by the p53-p21 axis in lamin A/C-depleted cells. Aging Cell 10: 789-797.
- 4. Fiorentino, F.P., et al. 2011. CTCF and BORIS regulate Rb2/p130 gene transcription: a novel mechanism and a new paradigm for understanding the biology of lung cancer. Mol. Cancer Res. 9: 225-233.
- Alquezar, C., et al. 2012. Inactivation of CDK/pRb pathway normalizes survival pattern of lymphoblasts expressing the FTLD-progranulin mutation c.709-1G>A. PLoS ONE 7: e37057.
- Costa, C., et al. 2012. E2F1 loss induces spontaneous tumour development in Rb-deficient epidermis. Oncogene 32: 2937-2951.
- Macaluso, M., et al. 2012. Integrating role of T antigen, Rb2/p130, CTCF and BORIS in mediating non-canonical endoplasmic reticulumdependent death pathways triggered by chronic ER stress in mouse medulloblastoma. Cell Cycle 11: 1841-1850.

### MONOS Satisfation

Guaranteed

Try p130 (A-10): sc-374521 or p130 (DCS-215): sc-53641, our highly recommended monoclonal alternatives to p130 (C-20).