# SANTA CRUZ BIOTECHNOLOGY, INC.

# p107 (SD9): sc-250



## BACKGROUND

The human retinoblastoma gene product plays an important role in the negative regulation of cell proliferation. Functional inactivation of Rb can be mediated either through mutation or as a consequence of interaction with DNA tumor virus encoded proteins. pRb and the structurally related p107 form complexes with E2F, a transcription factor originally identified through its role in transcriptional activation of the adenovirus E2 promoter. Moreover, pRB and p107 share a high degree of structural homology in the adenovirus E1A binding domain (i.e. "pocket region") that is believed to play a primary role in the function of these proteins. A protein designated p130 shows a high degree of identity with pRb and p107 and also possesses a pocket region.

## CHROMOSOMAL LOCATION

Genetic locus: RBL1 (human) mapping to 20q11.23; Rbl1 (mouse) mapping to 2 H1.

#### SOURCE

p107 (SD9) is a mouse monoclonal antibody raised against human recombinant p107 protein.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-250 X, 200  $\mu$ g/0.1 ml.

p107 (SD9) is available conjugated to agarose (sc-250 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-250 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-250 PE), fluorescein (sc-250 FITC), Alexa Fluor<sup>®</sup> 488 (sc-250 AF488), Alexa Fluor<sup>®</sup> 546 (sc-250 AF546), Alexa Fluor<sup>®</sup> 594 (sc-250 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-250 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-250 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-250 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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#### **APPLICATIONS**

p107 (SD9) is recommended for detection of p107 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for p107 siRNA (h): sc-29423, p107 siRNA (m): sc-29424, p107 shRNA Plasmid (h): sc-29423-SH, p107 shRNA Plasmid (m): sc-29424-SH, p107 shRNA (h) Lentiviral Particles: sc-29423-V and p107 shRNA (m) Lentiviral Particles: sc-29424-V.

p107 (SD9) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of p107 isoforms: 68/121 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, NIH/3T3 whole cell lysate: sc-2210 or 3T3-L1 cell lysate: sc-2243.

### **STORAGE**

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

# DATA





of formalin-fixed HeLa cells showing nuclear and

p107 (SD9): sc-250. Western blot analysis of p107 expression in F9 (**A**), NIH/3T3 (**B**), 3T3-L1 (**C**), SJRH30 (**D**) and MCF7 (**E**) whole cell lysates.

SELECT PRODUCT CITATIONS

s. cytoplasmic localization.

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- 8. Chimploy, K., et al. 2009. E2F4 and ribonucleotide reductase mediate S-phase arrest in colon cancer cells treated with chlorophyllin. Int. J. Cancer 125: 2086-2094.
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- 10. Lakshmi, S.P., et al. 2017. Transforming growth factor  $\beta$  suppresses peroxisome proliferator-activated receptor  $\gamma$  expression via both SMAD binding and novel TGF- $\beta$  inhibitory elements. Biochem. J. 474: 1531-1546.

#### **RESEARCH USE**

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