SANTA CRUZ BIOTECHNOLOGY, INC.

p107 (374-490): sc-4275 WB

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Sequences homologous to the E2F binding site have been found upstream of a number of genes that encode proteins with putative functions in the G_1 and S phases of the cell cycle. 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. p107/E2F complex is associated with two different Cdk2 kinase complexes, one containing cyclin A and the other containing cyclin E. The appearance of these complexes is temporally regulated during the cell cycle. In addition, a protein designated p130 shows a high degree of identity with pRb and p107 and also possesses a pocket region.

REFERENCES

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SOURCE

p107 (374-490) is expressed in *E. coli* as a 40 kDa tagged fusion protein corresponding to amino acids 374-490 of p107 of human origin.

PRODUCT

p107 (374-490) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatograpy; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

p107 (374-490) is suitable as a Western blotting control for sc-8345.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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