SANTA CRUZ BIOTECHNOLOGY, INC.

p130 (406-530): sc-4405 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. 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. p130 undergoes cell cycle dependent phosphorylation during the mid-G_1 to S phase transition and this phosphorylation is dependent upon the activity of cyclin D/Cdk4. In contrast to pRb and p107, p130 is 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. Most of the phospho-serine and phospho-threonine residues are clustered within a short co-linear region unique to p130, defined as the Loop.

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SOURCE

p130 (406-530) is expressed in *E. coli* as a 41 kDa tagged fusion protein corresponding to amino acids 406-530 of p130 of human origin.

PRODUCT

p130 (406-530) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg protein in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

p130 (406-530) is suitable as a Western blotting control for sc-9963 and sc-20678.

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.