SANTA CRUZ BIOTECHNOLOGY, INC.

p18 (1-168): sc-4336 WB

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The normal progression of cells through the cell cycle is under the control of the cyclin dependent protein kinases Cdk4 and Cdk6, which are subject to inhibition by the mitotic inhibitory protein p16. Isolated members of the p16 family have been designated p15 and p18. p15 expression is upregulated approximately 30-fold in TGFβ-treated human keratinocytes. The gene encoding p15 has been mapped to chromosome 9p21 at a position adjacent to the p16 gene, at a site of frequent chromosomal abnormality in human tumors. It has been suggested that p15 may function as an effector of TGFβ-mediated cell cycle arrest through inhibition of Cdk4 and Cdk6 kinase. The second p16-related protein, p18, interacts strongly with Cdk6 and to a lesser extent with Cdk4, but lacks apparent interaction with other Cdks. Recombinant p18 has been shown to inhibit cyclin D-Cdk6 kinase activity. In contrast to p21/p27 that form ternary complexes with cyclin-Cdks, only binary complexes of p15, p16 and p18 have been identified in association with Cdk4 and/or Cdk6.

REFERENCES

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SOURCE

p18 (1-168) is expressed in *E. coli* as a 45 kDa tagged fusion protein corresponding to amino acids 1-168 representing full length p18 of mouse origin.

STORAGE

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

PRODUCT

p18 (1-168) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

p18 (1-168) is suitable as a Western blotting control for sc-864, sc-865, sc-1064 and sc-1208.

RESEARCH USE

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