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p16 (1-156): sc-4079

BACKGROUND

The progression of cells through the cell cycle is regulated by a family of protein kinases known as cyclin dependent kinases (Cdks). The sequential activation of individual members of this family and their consequent phosphorylation of critical substrates promotes orderly progression through the cell cycle. The cyclins function as differentially expressed positive regulators of Cdks. Negative regulators of the cycle include the p53-inducible, 21 kDa WAF1/Cip1 protein variously designated p21, Kip 1 p27 and p16. The complexes formed by Cdk4 and the D-type cyclins have been strongly implicated in the control of cell proliferation during the G1 phase. It has recently been shown that p16 binds to Cdk4 and inhibits the catalytic activity of the Cdk4/cyclin D complex. Moreover, the gene encoding p16 exhibits a high frequency of homozygous deletions and point mutations in established human tumor cell lines.

REFERENCES

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SOURCE

p16 (1-156) is expressed in *E. coli* as a 43 kDa tagged fusion protein corresponding to full length (amino acids 1-156) p16 of human origin.

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.

PRODUCT

p16 (1-156) is purified from bacterial lysates (>98%) by glutathione affinity chromatography and supplied as 50 μ g purified protein in PBS containing 5 mM DTT and 50% glycerol.

Available as a Western blotting control; 10 μ g in 0.1 ml SDS-PAGE loading buffer, p16 (1-156): sc-4079 WB.

APPLICATIONS

p16 (1-156) is suitable as a Western blotting control for sc-467, sc-468, sc-759, sc-1661, and sc-9968.