

p16 (N-20): sc-467



The Power to Question

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 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.

CHROMOSOMAL LOCATION

Genetic locus: CDKN2A (human) mapping to 9p21.3; Cdkn2a (mouse) mapping to 4 C4.

SOURCE

p16 (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of p16 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-467 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p16 (N-20) is recommended for detection of p16 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p16 (N-20) is also recommended for detection of p16 in additional species, including porcine.

Suitable for use as control antibody for p16 siRNA (h): sc-36143, p16 shRNA Plasmid (h): sc-36143-SH and p16 shRNA (h) Lentiviral Particles: sc-36143-V.

Molecular Weight of p16: 16 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, HeLa whole cell lysate: sc-2200 or SHP-77 whole cell lysate: sc-364258.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

STORAGE

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

DATA

SELECT PRODUCT CITATIONS

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