

Product Data Sheet: p16 (C20)

Cat. No: AB-10220

Size: 200 ug

Clone: POLY

Concentration: 1mg/ml

Host: Rb Isotype: IgG

Reactivity: Hu

Applications: WB, IP, IHC(P)

Purification: Aff. Pur.

Cyclin-dependent kinase inhibitor 2A; multiple tumor suppressor 1, ARF; CDK4I;

Synonyms: CDKN2; CMM2; INK4; INK4A; MLM; MTS-1; MTS1; P14; P14ARF; P16; P16-INK4A;

P16INK4; P16INK4A

The progression through the cell cycle is regulated by cyclins and their cognate Cdks by promoting cell cycle transitions (1,2,3). This orderly progression can be inhibited

by a family of proteins known as CDK inhibitors (CDIs) that bind to cyclin/Cdk

complexes and halt cell division (3). p21 (also designated WAF1/Cip1) is one has been

shown to inhibit the activity of each member of the cyclin/Cdk family and over expression of this protein inhibits the proliferation of mammalian cells (5). The expression of p21 is inducible by a wide range of stress stimuli and its transcription

Background: can be enhanced by p53 (6). Another member of the CDIs is p27 (also known as

Kip1), which also sees up regulation in response to antimitogenic stimuli (7). The increased protein expression of p27 results in cellular arrest by binding to cyclin/Cdk complexes, like cyclin D1/Cdk4 (4,8). An additional CDI has been found to bind Cdk4 and Cdk6, p16 (INK4A), and when such complexes are formed, the progression of the cell cycle is halted (9). It has become increasingly clear that p16 is a very important tumor suppressor gene whose frequent loss occurs early in many human cancers. p16 is a major target in carcinogenesis that is rivaled in frequency only by p53 (10).

Form: Liquid

Buffer: Each vial contains 200 μg/ 1 ml of affinity purified rabbit IgG, p16 (C20) AB-10220, in

1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Storage: Store this product at 4º C, do not freeze. The product is stable for one year from the

date of shipment.



Immunoperoxidase staining of formalinfixed, paraffin-embedded human tonsil showing expression in the mantle zone and the majority of cells in the germinal center negative – dilution1:50

References

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- 4. Sgambato A, Cittadini A, Faraglia B, Weinstein IB. 2000. Multiple functions of p27(Kip1) and its alterations in tumor cells: a review. J Cell Physiol 183(1):18-27.
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- 7. Slingerland J, Pagano M. 2000. Regulation of the cdk inhibitor p27 and its deregulation in cancer. J Cell Physiol 183(1):10-17.
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