

p16 INK4 clone G175-405

Instructions for Use

Specification:

Cyclins and cyclin-dependent kinases (cdks) form active complexes that regulate key events during the progression of the cell cycle and are evolutionarily highly conserved. The p16 protein has been identified as a specific inhibitor of cdk4 because it blocks cdk4 substrate phosphorylation. p16 inhibits cdk4 dependent phosphorylation of the tumor suppressor retinoblastoma protein (Rb) and Rb related proteins, p107 and p130. The biochemical properties of p16 suggest that it may be a tumor suppressor gene product. Recently a gene cloned from the short arm of human chromosome 9, Multiple Tumor Suppressor 1 (MTS1) has been identified as the gene for p16. The gene, now also known as the CDKN2 gene, has been found to be mutated in a very high percentage of tumors, including 75% of melanoma cell lines.

Availability:

Catalog No.	Contents	Volume
ILM5620-C01	p16 INK4	0,1 ml concentrate
ILM5620-C05	p16 INK4	0,5 ml concentrate
ILM5620-C1	p16 INK4	1,0 ml concentrate

Intended use: For Research Use Only

Clone: G175-405

Species of origin: Mouse

Isotype: IgG₁

Control Tissue: Human cervical cancer, tonsil

Staining: Cytoplasmic and Nuclear

Presentation: Monoclonal antibody purified from tissue culture supernatant or ascites by affinity chromatography. Aqueous buffered solution containing BSA, goat serum, and ≤0.09% sodium azide

Application and suggested dilutions:

Pretreatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of cryostat tissue sections (dilution 1:50 - 1:100)
- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution 1:50 - 1:100)

The optimal dilution for a specific application should be determined by the investigator.

Note: Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

Storage & Stability: Store at 2-8 °C. Do not use after expiration date printed on the vial.

References:

- 1) Kamb A, Gruis NA, Weaver-Feldhaus J, et al, Science. 1994; 264(5157):436-440.
- 2) Marx J, Science. 1994; 265(5177):1364-1365.
- 3) Serrano M, Hannon GJ, Beach, Nature. 1993; 366(6456):704-707.
- 4) Yeager T, Stadler W, Belair C, Puthenveetil J, Olopade O, Reznikoff C., Cancer Res. 1995; 55(3):493-497.