

Monoclonal Antibody to P16 (Mouse and Human)

Cat. #: Mab-607071

Description:

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, Kip1 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.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant P16 expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography

Reference:

1. Hunter, T. 1993. Cell 75: 839-841.
2. Sherr, C.J. 1993. Cell 73: 1059-1065.
3. El-Deiry, W.S., et al. 1993. Cell 75: 817-825.

Clone Number: 1E12E10

Isotype: IgG1

Species: Human, Rat, Mouse

Storage and Stability: stored at -20 C

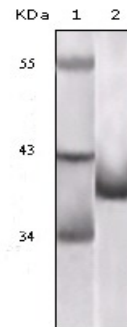


Figure 1: Western blot analysis using P16 monoclonal antibody against truncated P16 recombinant protein

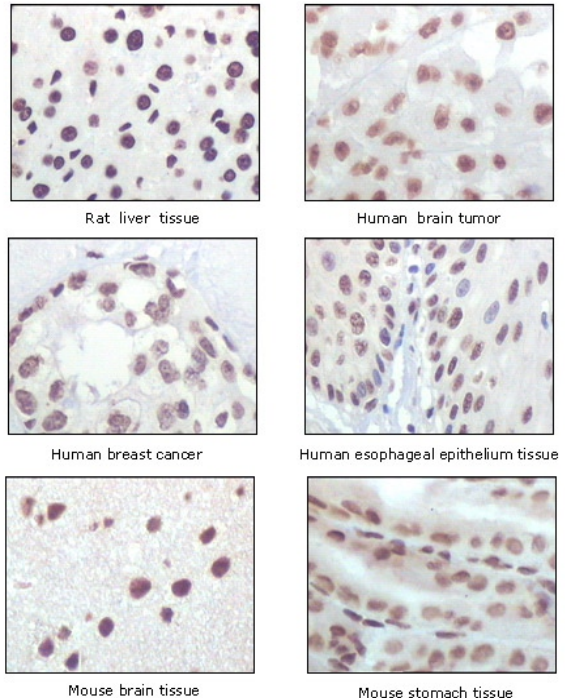


Figure 2: Immunohistochemical analysis of paraffin-embedded Rat liver tissue, human brain tumor, breast cancer, Esophageal epithelium tissue and mouse brain, stomach tissue showing nucleolus location using P16 antibody with DAB staining.