p16 INK4a

Prediluted Monoclonal Antibody
903-3228-080618

BIOCARE MEDICAL

Catalog Number:	**APA 3228 AA**
Description:	6.0 ml, prediluted
Dilution:	Ready-to-use
Diluent:	N/A

Intended Use:
Analyte Specific Reagent. Analytical and performance characteristics are not established.

Summary & Explanation:
p16 INK4a is a tumor suppressor protein involved in the pathogenesis of a variety of malignancies. It is a specific inhibitor of cdk4/cdk6. Recent analyses of the p16INK4a gene revealed homozygous deletions, nonsense, missense, or frameshift mutations in several human cancers (1). Although the frequency of p16 INK4a abnormalities is higher in tumor-derived cell lines than in unselected primary tumors, significant subsets of clinical cases with aberrant p16 INK4a gene have been reported among melanomas, gliomas, esophageal, pancreatic, lung, and urinary bladder carcinomas (2). p16 immunoreactivity in paraffin-embedded tissues has also been shown to be an independent predictor in minimally invasive urothelial bladder cancer; a prognostic factor in non-small cell lung carcinoma; and has been shown to predict a positive response to chemoradiotherapy in Stage IV head and neck squamous cell carcinoma (3-6).

Source: Mouse monoclonal

Clone: 10

Isotype: IgG2a

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As:
Buffer with protein carrier and preservative

Storage and Stability:
Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC.

Analyte Specific Reagent Note:
The p16 INK4a antibody has been quality controlled by IHC using Biocare's MACH 4 Detection System with antigen retrieval. However, it is the responsibility of the laboratory or end-user to develop their own protocol and label appropriate disclaimer.

References:

1. LaPak KM, Burd CE. The molecular balancing act of p16(INK4a) in cancer and aging. Mol Cancer Res. 2014 Feb;12(2):167-83.
2. Mahajan A. Practical issues in the application of p16 immunohistochemistry in diagnostic pathology. Hum Pathol. 2016 May;51:64-74.
3. Tong J, *et al*. Expression of p16 in non-small cell lung cancer and its prognostic significance: A meta-analysis of published literatures. Lung Cancer. 2011 Nov;74(2):155-63.
4. Chen YJ, *et al*. High p16 expression predicts a positive response to chemoradiotherapy in stage IVa/b head and neck squamous cell carcinoma. Asian Pac J Cancer Prev. 2011; 12(3):649-55.
5. Snow AN, Laudadio J. Human papillomavirus detection in head and neck squamous cell carcinomas. Adv Anat Pathol. 2010 Nov; 17(6):394-403.
6. Buza N, *et al*. Inverse p16 and p63 expression in small cell carcinoma and high-grade urothelial cell carcinoma of the urinary bladder. Int J Surg Pathol. 2010 Apr; 18 (2):94-102.
7. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

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