

P16 (JC2)

Mouse Monoclonal Antibody

SAM-MM126-2

MM126-10

Document Number: IFU-326_MM126-P16 (JC2)

Release Date: 05/20/2019, IFU-326 Rev A

Immunogen	Clone	Species	Isotype	Primary Antibody Diluent
Purified recombinant prokaryotic full length human P16 ^{INK4} protein	JC2	Mouse	IgG2a	NA
<i>Epitope: Not Determined</i>		<i>Species Reactivity: Human</i>		

Catalog Number	Description
SAM-MM126-2	2mL Ready To Use antibody for use with StatLab Ultra High Def HRP or Ultra High Def AP Detection kit.
MM126 -10	10mL Ready To Use antibody for use with StatLab Ultra High Def HRP or Ultra High Def AP Detection kit.
MM126-25	25mL Ready To Use antibody for use with StatLab Ultra High Def HRP or Ultra High Def AP Detection kit

Intended Use

For In Vitro Diagnostic Use.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Clinical interpretation of staining results should be accompanied by histological studies with proper controls. Patients' clinical histories and other relevant diagnostic tests should be utilized by a qualified person(s) when evaluating and interpreting results.¹

Summary and Explanation

P16 is a mitotic inhibitor protein. It competes with D-type cyclins to bind to cdk4 and cdk6. It acts as tumor suppressor and inhibits the progression of cells through the G1 phase of the cell cycle.

Format

This product is supplied as a tissue culture supernatant and contains sodium azide as a preservative.

Materials and Reagents Needed but Not Provided

The following reagents and materials may be required for staining but are not provided with the primary antibody. Please refer to our website at: www.StatLab.com.

1. Ultra High Def™ AP Detection Kit (Cat. No.: P1-U-20-AUTO-AP OR
1. Ultra High Def™ HRP Detection Kit (Cat. No.: P2-U-20-AUTO-HRP)
2. 10x EDTA Retrieval Solution, pH 8.0 (Cat. No.: ACR-003)
3. 10x Citrate Buffer, pH 6.0 (Cat. No.: ACR-002)
4. Ultra High Def™ Peroxidase Block-ACR-023
5. 10x IHC Wash Buffer (Cat. No.: ACR-015)
6. Positive and Negative Tissue controls

Storage and Handling

Store at 2-8°C. Do NOT freeze. When stored properly, the reagents are stable to the date indicated on the label. The presence of an unusual odor or precipitate indicates that the antibody is deteriorating and should not be used. Do not use reagents beyond the expiration date printed on the vial. The user must validate any storage conditions other than these specified in the package insert.

Principles of the Procedures

Antigen detection by immunohistochemistry (IHC) is a two-step process involving first, the binding of a primary antibody to the antigen of interest, and second, the detection of bound antibody by a chromogen. The primary antibody may be used in IHC using manual techniques or using automated IHC Staining Systems.

Warnings and Precautions

1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials.
2. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing.
3. Specimens, before and after fixation and all materials exposed to them, should be handled as if capable of transmitting infections and disposed of with proper precautions.
4. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water.
5. Microbial contamination of reagents may result in an increase in nonspecific staining.
6. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
7. The SDS is available upon request.
8. Do not use reagents beyond the expiration date printed on the vial.
9. The user must validate any storage conditions other than these specified in the package insert

Specimen Collection and Preparation

Tissues fixed in 10% formalin are suitable for use prior to paraffin embedding.

The user is advised to validate the use of the products with their tissue specimens prepared and handled in accordance with their laboratory practices



Parameter	Recommendations
Positive Control	Uterine cervical squamous cell carcinoma
Concentrated Dilution	N/A
Pretreatment	EDTA Buffer pH8.0
Incubation Time & Temperature	30 min @ RT
Tissue Type	FFPE

Troubleshooting

Positive and negative controls should be run simultaneously with all patient specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the antibody is suspected, contact StatLab IHC Technical Support via Email at: ihctech@statlab.com or call us at (800) 442-3573.

Cellular Localization and Positive Tissue Control

Positive Tissue Control	
Tissue	Visualization
Uterine Cervical Squamous Cell Carcinoma	Nuclear and Cytoplasmic

Limitations of the Procedure

IHC is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining

can also cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue may cause variations in results⁹. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems¹⁰. Improper counterstaining and mounting may compromise the interpretation of results.

Performance Characteristics

The optimum antibody protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, and tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times may vary. The data sheet recommendations and protocols are based on exclusive use of products manufactured for StatLab. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

NOTE

There are no expressed or implied warranties which extend beyond this datasheet. StatLab is not liable for personal injury, property damage or economic loss caused by this product

References

1. Sherr CJ *et al.* D-type cyclins and their cyclin-dependent kinases: G1 phase intergrators of the mitogenic response. Cold Spring Harb Symp Quant Biol 1994; 59:11-9

