p120 Catenin
Concentrated and Prediluted Monoclonal Antibody
Control Number: 901-3008-082614

Catalog Number: ACI 3008 A, B
Description: 0.1, 0.5 ml, concentrated
Dilution: 1:150 to 1:250
Diluent: Renoir Red

Intended Use: For In Vitro Diagnostic Use

Summary and Explanation:
p120 is a proliferation-associated nucleolar protein found in most human malignant tumors, but not in resting normal cells. The expression of p120 has been statistically correlated with the proliferation capacity in human lung cancer cells and could be a prognostic marker for resected Stage I lung adenocarcinoma. In colorectal cancer the altered localization of p120 catenin has been found to correspond with loss of cytoplasmic localization of E-cadherin and has been associated with a significant reduction in patient survival time and an increase in tumor stage and lymph node metastasis. This data highlights the importance of both p120 catenin and E-cadherin in the progression of colorectal carcinoma. The distinction between lobular and ductal lesions of the breast is important in several circumstances. Diagnostic reproducibility of lobular vs. ductal lesions, based on histology alone, is less than optimal. The proper distinction between atypical lobular hyperplasia, lobular carcinoma in situ and low-grade ductal carcinoma in situ is critical for patient management. E-cadherin, a negative membrane marker for lobular neoplasia, is useful in the distinction of ductal neoplasia vs. lobular; however as a negative marker for lobular carcinoma, it can be difficult to interpret, particularly in challenging cases. Studies have shown accurate categorization of ductal vs. lobular neoplasia in the breast was achieved p120 staining and helped give further clarification in the separation of low-grade ductal carcinoma in situ from lobular neoplasia. Diagnostically, p120 can be particularly useful in identifying early lesions of lobular neoplasia. Studies have also shown that altered expression of p120 catenin predicts poor outcome in invasive breast cancer.

Principle of Procedure:
Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, a secondary antibody is added to bind to the primary antibody. An enzyme label is then added to bind to the secondary antibody; this detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Mouse monoclonal
Species Reactivity: Human; others not tested
Clone: 98/pp120
Isotype: IgG1
Total Protein Concentration: ~10 mg/ml. Call for lot specific IgG concentration.

Epitope/Antigen: p120 catenin
Cellular Localization: Cytoplasm & membrane
Positive Control: Breast cancer
Normal Tissue: Breast

Abnormal Tissue: Breast cancer

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

Supplied As: Buffer with protein carrier and preservative.

Storage and Stability:
Store at 2°C to 8°C. 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 2°C to 8°C.

Protocol Recommendations:
Peroxide Block: Block for 5 minutes with Biocare's Peroxidized 1.
Pretreatment Solution: Diva

Protocol Recommendations Cont'd:
Pretreatment Protocol:
Preheat the retrieval solution to 95°C for 30 minutes in Biocare’s Decloaking Chamber. Then, place slides into the preheated solution and retrieve under pressure at 95°C for 40 minutes. Alternatively, steam tissue sections for 45-60 minutes or use a water bath at 95°C for 40 minutes. Allow solution to cool for 20 minutes then wash in distilled water.

Primary Antibody: Incubate for 10 minutes at RT with Biocare's Background Punisher.

Primary Antibody (Optional): Incubate for 10 minutes at RT with a primary antibody.

Probe: Incubate for 10 minutes at RT with a probe.

Polymer: Incubate for 10 minutes at RT with a polymer.

Chromogen: Incubate for 5 minutes at RT when using Biocare’s DAB – OR – Incubate for 5-7 minutes at RT when using Biocare’s Warp Red.

Counterstain: Counterstain with hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

Technical Note:
This antibody has been standardized with Biocare's MACH 4 detection system. It can also be used on an automated staining system and with other Biocare polymer detection kits. Use TBS buffer for washing steps.

Limitations:
The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. 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.

Quality Control:

Precautions:
This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC.

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. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976)

Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. 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. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request and is located at http://biocare.net/support/msds/.
**References:**


**Troubleshooting:**

Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare’s Technical Support at 1-800-542-2002.