### Pan Cytokeratin [AE1/ AE3]

**Concentrated and Prediluted Antibody Cocktail**  
902-011-062917

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**Catalog Number:**  
<table>
<thead>
<tr>
<th>ACR 011 A, B, C</th>
<th>APR 011 AA, H</th>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>0.1, 0.5, 1.0 ml, concentrated</td>
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<tr>
<td>** Dilution:**</td>
<td>1:100</td>
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<tr>
<td><strong>Diluent:</strong></td>
<td>Da Vinci Green</td>
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</tbody>
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**Intended Use:**  
For Research Use Only. Not for use in diagnostic procedures.

**Summary and Explanation:**  
AE1/AE3 recognizes the acidic and basic (Type I and II) subfamilies of cytokeratins. The cocktail of these two antibodies can be used to detect most human epithelia. The acidic cytokeratins have molecular weights of 56.5, 55, 51, 50, 48, 46, 45, and 40 kDa. The basic cytokeratins have molecular weights of 65-67, 64, 59, 58, 56 and 52 kDa. This pan cytokeratin antibody has proved useful as a screener for the majority of human carcinomas.

**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, mouse and rat  
**Isotype:** IgG1  
**Total Protein Concentration:** ~10 mg/ml. Call for lot specific Ig concentration.

**Epitope/ Antigen:** AE1/AE3  
**Cellular Localization:** Cytoplasmic  
**Positive Control:** Skin or adenocarcinoma  
**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.

**Staining Protocol Recommendations Cont’d:**

**Peroxide Block:** Block for 5 minutes with Biocare's Peroxidized 1.

**Pretreatment Protocol:** 
Pretreatment may be performed by heat retrieval or enzyme digestion.

**Heat Retrieval Method:** 
Perform heat retrieval using Biocare's Reveal Decloaker. Refer to the Reveal Decloaker product data sheet for specific instructions.

**Digestion Method:** 
Digest with Trypsin enzyme for 5 minutes at 37ºC -or- for 20 minutes at RT.

**Protein Block (Optional):** Incubate for 5-10 minutes at RT with Biocare's Background Punisher.

**Primary Antibody:** Incubate for 30 minutes at RT.

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

**Polymer:** Incubate for 10-20 minutes at RT with a tertiary polymer.

**Chromogen:** Incubate for 5 minutes at RT with Biocare’s DAB -OR- Incubate for 5-7 minutes at RT with Biocare’s Warp Red.

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**Staining Protocol Recommendations Cont’d:**

**Counterstain:** Counterstain with hematoxylin. Rinse with deionized water.

**Technical Note:** 
This antibody has been standardized with Biocare's MACH 4 detection system. Use TBS for washing steps.

**Limitations:** 
This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

**Precautions:**
1. 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) (5)
2. 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. (6)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.
6. The SDS is available upon request and is located at http://biocare.net/support.

**Technical Support:** 
Contact Biocare’s Technical Support at 1-800-542-2002 for questions regarding this product.

**References:**
References Cont’d: