**CDX2 (RM)**  
Concentrated and Prediluted Rabbit Monoclonal Antibody  
902-3144-080917

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>Description:</th>
<th>Dilution:</th>
<th>Diluent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 3144 A, B</td>
<td>0.1, 0.5 ml, concentrated</td>
<td>1:100</td>
<td>Da Vinci Green</td>
</tr>
<tr>
<td>APR 3144 AA</td>
<td>6.0 ml, prediluted</td>
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<td>N/A</td>
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**Intended Use:**  
For Research Use Only. Not for use in diagnostic procedures.

**Summary and Explanation:**  
CDX2 is a homeobox gene that encodes an intestine-specific transcription factor (1). CDX2 has been useful to establish gastrointestinal origin of metastatic adenocarcinomas and carcinoids and can be especially useful in distinguishing metastatic colorectal adenocarcinoma from tumors of unknown origin (1-7). CDX2 has been shown to be more specific and more sensitive than villin or CK20 (1,4,6). CDX2 has also been shown to be expressed in mucinous ovarian cancer, bladder adenocarcinoma, cholangiocarcinoma and malignant germ cell tumors of the testes (1,2,6-8). Only very rare examples of carcinomas of the genitourinary and gynecologic tracts or breast, lung, and head and neck cancers showed elevated levels of CDX2 expression (1). Recently, a new rabbit monoclonal CDX2 has been developed and studies have shown that CDX2 rabbit monoclonal is a more sensitive clone than other CDX2 mouse monoclonal antibodies. Data has also shown that rabbit monoclonal CDX2 had fewer false negatives (9). The specificity was similar when compared to other mouse monoclonal CDX2 antibodies. However, in certain cancers, rabbit monoclonal CDX2 displayed a slightly higher percentage (9). The overall specificity for CDX2 antibodies can be significantly improved in a panel with CK7, TTF-1 and CDH17 (3,4,6,10).

**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, an enzyme labeled polymer is added to bind to the primary antibody. The detection of the bound antibody is evidenced by a colorimetric reaction.

**Source:**  
Rabbit monoclonal

**Species Reactivity:**  
Human; others not tested

**Clone:**  
EP25

**Isotype:**  
IgG

**Total Protein Concentration:**  
~10 mg/ml. Call for lot specific Ig concentration.

**Epitope/Antigen:**  
A synthetic peptide corresponding to residues near the C-term of human CDX2 protein

**Cellular Localization:**  
Nuclear

**Positive Tissue Control:**  
Normal colon or colon 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.

**Staining Protocol Recommendations Cont’d:**

- **Peroxide Block:** Block for 5 minutes with Biocare’s Peroxidized 1.
- **Pretreatment:** Perform heat retrieval using Biocare’s Diva Decloaker. Refer to the Diva Decloaker product data sheet for specific instructions.

- **Primary Antibody:** Incubate for 30 minutes at RT.
- **Probe:** N/A
- **Polymer:** Incubate for 30 minutes at RT with a secondary-conjugated 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.
- **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. Use TBS buffer 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.

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) (11)
2. Specimens, before and after fixation, and all materials exposed to azide 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 into contact with sensitive areas, wash with copious amounts of water. (12)
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.

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

**References:**
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References Cont’d:

Produced using Abcam’s RabMAB® technology. RabMAB® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.