CD117/c-kit
Concentrated and Prediluted Rabbit Monoclonal Antibody
901-296-121917

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>CME 296 AK, BK, CK</th>
<th>PME 296 AA</th>
<th>IP 296 G10</th>
<th>OAI 296 T60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>0.1, 0.5, 1.0 ml, concentrated</td>
<td>6.0 ml, prediluted</td>
<td>10 ml, prediluted</td>
<td>60 tests, prediluted</td>
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<tr>
<td>Dilution:</td>
<td>1:50</td>
<td>Ready-to-use</td>
<td>Ready-to-use</td>
<td>Ready-to-use</td>
</tr>
<tr>
<td>Diluent:</td>
<td>Renoir Red</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Intended Use:**
For In Vitro Diagnostic Use

CD117/c-kit [EP10] is a rabbit monoclonal antibody that is intended for laboratory use in the qualitative identification of CD117 protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient’s clinical history and other diagnostic tests by a qualified pathologist.

**Summary and Explanation:**
CD117/c-kit is a member of the Tyrosine Kinase KDa(-3) Receptor (TKR) family and highly homologous to receptor PDGF and CSF-1. This antibody recognizes the extracellular domain and is expressed by a variety of normal and abnormal cell types. In normal cells, the CD117 antibody has been shown to label breast epithelium, germ cells, melanocytes, stem cells and mast cells. In abnormal cells, it has been shown to label testicular germ cells, endometrial carcinomas, papillary and follicular thyroid carcinomas, small cell carcinomas, melanomas and ovarian epithelial carcinomas. It has also been shown to be an effective marker for mast cell disorders, gastrointestinal stromal tumors and immunotyping of blasts in human bone marrow.

**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. This detection of the bound antibody is evidenced by a colorimetric reaction.

**Source:** Rabbit monoclonal

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

**Clone:** EP10 (previously known as Y145)

**Isotype:** IgG

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

**Epitope/Antigen:** CD117

**Cellular Localization:** Cell membrane/cytoplasmic

**Positive Control:** Skin (Mast cells), gastrointestinal stromal tumor or seminoma

**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 (intelliPATH and manual use):**

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

- **Cont'd:**
  - ** Protein Block (Optional):** Incubate for 5-10 minutes at RT with Biocare's Background Punisher.
  - ** 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-Immunostain for 5-7 minutes at RT with Biocare's WarRed.
  - ** Counterstain:**

**Technical Note:**
This antibody, for intelliPATH and manual use, has been standardized with Biocare's MACH 4 detection system. Use TBS 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. The clinical interpretation of any positive or negative staining should be evaluated within the context of clinical presentation, morphology and other histopathological criteria by a qualified pathologist. The clinical interpretation of any positive or negative staining should be complemented by morphological studies using proper positive and negative internal and external controls as well as other diagnostic tests.

**Quality Control:**

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**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) (4)

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. (5)

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.

**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.

**References:**


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.