MUM-1
Concentrated and Prediluted Rabbit Monoclonal Antibody
901-352-11017

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>CRM 352 A, B</th>
<th>PRM 352 AA</th>
<th>OAI 352 T60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>0.1, 0.5 ml, concentrated</td>
<td>6.0 ml, prediluted</td>
<td>60 tests, prediluted</td>
</tr>
<tr>
<td>Dilution:</td>
<td>1:200</td>
<td>Ready-to-use</td>
<td>Ready-to-use</td>
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<tr>
<td>Diluent:</td>
<td>Da Vinci Green</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Intended Use:**
For In Vitro Diagnostic Use
MUM-1 (BCS) is a rabbit monoclonal antibody that is intended for laboratory use in the qualitative identification of MUM-1 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:**
Multiple myeloma oncogene-1 (MUM-1) is a 50 kDa protein encoded by the MUM-1 gene. Studies have shown IRF4 / MUM-1 is expressed in the nuclei and cytoplasm of plasma cells and a small percentage of germinal center (GC) B cells located in the "light zone". This antibody labels MUM-1 protein in centrocytes and their progeny, plasma cells, activated T cells, and a wide spectrum of hematolymphoid neoplasms derived from these cells (1-3).

**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 and dog

**Clone:** BC5

**Isotype:** IgG

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

**Epitope/Antigen:** MUM-1 protein

**Cellular Localization:** Nuclear and cytoplasmic

**Positive Tissue Control:** Tonsil

**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 Reveal Decloaker. Refer to the Reveal Decloaker product data sheet for specific instructions.

**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 – Incubate for 5-7 minutes at RT with Biocare's Warp Red.

**Protocol Recommendations (ONCORE Automated Slide Staining System):**

**Protocol Name:** MUM-1 Rb

**Protocol Template (Description):** Rb HRP Template 1

**Dewaxing (DS Option):** DS2

**Antigen Retrieval (AR Option):** AR2, low pH; 90°C

**Reagent Name, Time, Temp.:** MUM-1 Rb, 30 min., 25°C

**Technical Note:**
This antibody has been optimized for use with Biocare's MACH 4 Universal HRP-Polymer Detection and ONCORE Rabbit HRP Detection. 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 titer s 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:**

**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.

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Precautions Cont’d:
and specimens. If reagents or specimens come into 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: