Cytokeratin 7 (CK7)
Concentrated and Prediluted Monoclonal Antibody
901-061-081920

**Available Product Formats**

<table>
<thead>
<tr>
<th>Format</th>
<th>Catalog Number</th>
<th>Description</th>
<th>Dilution</th>
<th>Diluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrate</td>
<td>CM 061 A, B, C</td>
<td>0.1, 0.5, 1.0 mL</td>
<td>1:100</td>
<td>Da Vinci Green</td>
</tr>
<tr>
<td>Predilute</td>
<td>PM 061 AA</td>
<td>6.0 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
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<tr>
<td>intelliPATH FLX</td>
<td>IP 061 G10</td>
<td>10 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
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<tr>
<td>ONCORE</td>
<td>OAI 061 T60</td>
<td>60 tests</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>ONCORE Pro</td>
<td>OPAI 061 T60</td>
<td>60 tests</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>VALENT</td>
<td>VLM 061 G20</td>
<td>20 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
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</tbody>
</table>

**Intended Use:**
For In Vitro Diagnostic Use
Cytokeratin 7 (CK7) [OV-TL 12/30] is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of cytokeratin 7 (CK7) 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:**
Cytokeratin 7 is an intermediate filament protein (IFP) of 54 kDa that recognizes the simple epithelium found in most glandular and transitional epithelia; but not that which is found in stratified squamous epithelia. This monoclonal antibody [OV-TL 12/30] is highly specific to cytokeratin 7 and shows no cross-reaction with other IFPs. Cytokeratin 7 is a basic cytokeratin, and is expressed in epithelial cells of ovary, lung, and breast, but not of colon or gastrointestinal tract. It is often used in conjunction with cytokeratin 20 in distinguishing ovarian, pulmonary, and breast carcinomas (CK7+) from colon carcinomas (CK7-).

**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 one-, two- or three-step detection procedure can be employed. The one-step procedure will feature an enzyme-labeled polymer that binds to the primary antibody. A two-step procedure will feature a secondary antibody added to bind to the primary antibody. An enzyme-labeled polymer is then added to bind to the secondary antibody. The three-step detection procedure will feature a secondary antibody added to bind to the primary antibody followed by a linker antibody step for maximum binding. An enzyme-labeled polymer is then added to bind to the linker antibody. These detections of the bound antibodies are evidenced by a colorimetric reaction.

**Source:** Mouse monoclonal

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

**Clone:** OV-TL 12/30

**Isotype:** IgG1

**Protein Concentration:** Call for lot specific Ig concentration.

**Epitope/Antigen:** CK7

**Cellular Localization:** Cytoplasmic

**Positive Tissue Control:** Ovarian or 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. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.
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Protocol Recommendations (ONCORE™ Automated Slide Staining System):
OA0161 is intended for use with the ONCORE. Refer to the User Manual for specific instructions for use. Protocol parameters in the Protocol Editor should be programmed as follows:

- **Protocol Name:** CK7
- **Protocol Template (Description):** Ms HRP Template 1
- **Dewaxing (DS Option):** DS2
- **Antigen Retrieval (AR Option):** AR2, low pH; 101°C
- **Reagent Name, Time, Temp.:** CK7, 30 min., 25°C

Protocol Recommendations (ONCORE™ Pro Automated Slide Staining System):
OPAI061 is intended for use with the ONCORE Pro. Refer to the User Manual for specific instructions for use. Protocol parameters in the Protocol Editor should be programmed as follows:

- **Protocol Name:** CK7
- **Protocol Template (Description):** Ms HRP Template 1
- **Dewaxing (DS Buffer Option):** DS2-50
- **Antigen Retrieval (AR Option):** AR2, low pH; 101°C
- **Block Option:** Buffer
- **Reagent Name, Time, Temp.:** CK7, 30 min., 25°C

**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.

**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) (7)
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. (8)
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:**