Chromogranin A
Concentrated and Prediluted Cocktail Antibody
901-010-030222

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 010 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 010 AA</td>
<td>6.0 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>intelliPATH FLX</td>
<td>IP 010 G10</td>
<td>10 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>ONCORE</td>
<td>OAI 010 T60</td>
<td>60 tests</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>ONCORE Pro</td>
<td>OPAI 010 T60</td>
<td>60 tests</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>Q.Series – For Leica BOND-III</td>
<td>AU 010 G7</td>
<td>7.0 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
<tr>
<td>UltraLine – For BenchMark</td>
<td>AVI 010 G</td>
<td>6.0 mL</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Intended Use:
For In Vitro Diagnostic Use
Chromogranin A [LK2H10 + PHE5] is a mouse monoclonal antibody cocktail that is intended for laboratory use in the qualitative identification of chromogranin A 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:
This antibody recognizes a protein of 68-75 kDa, identified as Chromogranin A (a protein of 439-amino acid which is encoded on chromosome 14). Although the epitopes for [LK2H10] and [PHE5] are not precisely mapped, experimental data suggests that they are different. A cocktail of LK2H10 and PHE5 is specifically designed for sensitive detection of Chromogranin A in formalin-fixed, paraffin-embedded tissues. Chromogranin A is present in neuroendocrine cells throughout the body, including the neuroendocrine cells of the large and small intestine, adrenal medulla and pancreatic islets. It is an excellent marker for carcinoid tumors, pheochromocytomas, paragangliomas and other neuroendocrine tumors. Coexpression of Chromogranin A and neuron specific enolase (NSE) is common in neuroendocrine neoplasms.

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-step or two-step detection procedure can be applied. The one-step procedure will feature an enzyme-labeled polymer that binds to the primary antibody. A two-step procedure will feature a linker antibody added to bind to the primary antibody. An enzyme-labeled polymer is then added to bind the linker antibody. These detections of the bound antibodies are evidenced by a colored reaction.

Source: Mouse monoclonal
Species Reactivity: Human; others not tested
Clone: LK2H10 + PHE5
Isotype: IgG1 + IgG1
Protein Concentration: Call for lot specific Ig concentration.
Epitope/Antigen: Chromogranin A
Cellular Localization: Finely granular cytoplasm
Positive Control: Pancreas or adrenal gland
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.

Protocol Recommendations (intelliPATH FLX® and manual use):
Peroxide Block: Block for 5 minutes with Peroxidized 1.
Pretreatment: Perform heat retrieval using Reveal Decloaker. Refer to the Reveal Decloaker product data sheet for specific instructions.
Protein Block (Optional): Incubate for 5-10 minutes at RT with Background Punisher.
Primary Antibody: Incubate for 30 minutes at RT.
Probe: Incubate for 10 minutes at RT with a secondary probe.
Peroxidase: 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 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, for intelliPATH FLX and manual use, has been standardized with MACH 4 detection system. Use TBS for washing steps.

Protocol Recommendations (ONCORE™ Automated Slide Staining System):
OAI010 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: Chromogranin
- Protocol Template (Description): Ms HRP Template 1
- Dewaxing (DS Option): DS Buffer
- Antigen Retrieval (AR Option): AR2, low pH; 101°C
- Reagent Name, Time, Temp.: Chromogranin, 30 min., 25°C

Protocol Recommendations (ONCORE™ Pro Automated Slide Staining System):
OPAI010 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: Chromogranin
- Protocol Template (Description): Ms HRP Template 1
- Dewaxing (DS Buffer Option): DS Buffer
- Antigen Retrieval (AR Option): AR2, low pH; 101°C
- Block Option: Buffer
- Reagent Name, Time, Temp.: Chromogranin, 30 min., 25°C

Protocol Recommendations (Ventana BenchMark ULTRA):
AVI010 is intended for use with the BenchMark ULTRA. Refer to the User Manual for specific instructions for use. Recommended protocol parameters are as follows:
- Template/Detection: OptiView DAB IHC
- Pretreatment Protocol: CC1 16 minutes
- Peroxidase: Pre-Primary Peroxidase Inhibitor
- Primary Antibody: 16 minutes, 36°C
Protocol Recommendations (Q Series – For Leica BOND-III):
AL1010 is intended for use with the Leica BOND-III. Refer to the User Manual for specific instructions for use. Recommended protocol parameters are as follows:
- **Protocol Name:** IHC Protocol F
- **Detection:** Bond Polymer Refine
- **HIER:** 30 min with ER1
- **Peroxide Block:** 5 min
- **Marker (Primary Antibody):** 15 min
- **Post Primary:** 8 min
- **Polymer:** 8 min
- **Mixed DAB Refine:** 10 min
- **Hematoxylin:** 5 min

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 recommendation protocols 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:

References Cont’d:

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Q Series antibodies are developed solely by Biocare Medical LLC and do not imply approval or endorsement of Biocare antibodies by Leica Biosystems. Biocare and Leica Biosystems are not affiliated, associated or related in any way. Leica, Leica Biosystems, BOND-MAX and BOND-III are trademarks of Leica Biosystems.