Leukocyte Common Antigen (LCA) Cocktail
Concentrated and Prediluted Cocktail Antibody
Control Number: 901-016-082117

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
<th>Dilution</th>
<th>Diluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 016 AK, BK, CK</td>
<td>0.1, 0.5, 1.0 ml, concentrated</td>
<td>1:100-1:1200</td>
<td>Van Gogh Yellow</td>
</tr>
<tr>
<td>PM 016 AA</td>
<td>6.0 ml, prediluted</td>
<td>Ready-to-use</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Intended Use:
For In Vitro Diagnostic Use
Leukocyte Common Antigen (LCA) Cocktail [PD7/26+2B11] is a mouse monoclonal antibody cocktail that is intended for laboratory use in the qualitative identification of leukocyte cellular surface marker protein CD45 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:
Studies have shown CD45 recognizes an antigen found on lymphoid cells. Most neoplastic B-cells and T-cells stain positively in leukemia and in non-Hodgkin's lymphomas; whereas most neoplastic myeloid and erythroid cells are negative (1-3). Studies have also shown it is unreactive with epithelium and connective tissues. The PD7/26 and 2B11 antibody was included in the 4th International Workshop and was designated as CD45. It belongs to an LCA family of glycoproteins with molecular weights of 180, 190, 205 and 220. It is well suited for formalin-fixed paraffin-embedded tissues and is used as a pan lymphocyte screener for lymphoma (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. A secondary antibody may be applied to bind the primary antibody, followed by an enzyme labeled polymer; or an enzyme labeled polymer may be applied directly to bind the primary antibody. The detection of the bound primary antibody is evidenced by an enzyme-mediated colorimetric reaction.

Source: Mouse monoclonal
Species Reactivity: Human; others not tested
Clone: PD7/26 and 2B11
Isotype: IgG1/kappa
Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration.
Epitope/Antigen: CD45 (Leukocyte Common Antigen)
Cellular Localization: Cell surface
Positive Control: Tonsil or lymphoma
Known Applications: Immunohistochemistry (formalin-fixed paraffin-embedded tissues)
Supplied As: Buffer with protein carrier and preservative
Van Gogh Yellow Diluent (PD902)
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.

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.

References:

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.