Kappa + Lambda

Prediluted Multiplex Cocktail (4-Step)

Control Number: 902-214DS-090917

Catalog Number: **APR 214 DS AA, H**

Description: 6.0, 25 ml, prediluted

Dilution: Ready-to-use

Diluent: N/A

Intended Use:
For Research Use Only. Not for use in diagnostic procedures

Summary and Explanation:
Kappa and Lambda antibodies are usually run together on two separate tissues. In normal tissue, the Kappa and Lambda cell ratio is approximately 2:1. The double stain antibody allows the investigator to simultaneously see both Kappa (M) (brown) and Lambda (P) (red) on the same tissue section, thus allowing the end-user a more accurate and easier assessment of both stains. The double stain predilute must be used in conjunction with Biocare's MACH 2 Double Stain Detection Kit (DAB and Fast Red).
The antibody cocktail recognizes both Kappa and Lambda light chains. It is reportedly useful in the identification of myelomas, plasmacytomas, and certain non-Hodgkin's lymphomas. The most common feature of these malignancies is the restricted expression of a single light chain class. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant.

Source: Mouse monoclonal and Rabbit Polyclonal

Species Reactivity: Human; others not tested.

Clone: KDB-1 (kappa only)

Isotype: IgG_1 (kappa only)

Epitope/Antigen: Kappa and Lambda light chains

Cellular Localization: Kappa: cytoplasmic (brown), Lambda: cytoplasmic (red)

Positive Control: Tonsil

Normal Tissue: Tonsil

Abnormal Tissue: Myeloma and plasmacytoma

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative.

Storage and Stability:
Store at 2ºC to 8ºC. 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 2ºC to 8ºC.

Protocol Recommendations

Peroxide Block:
Block for 5 minutes with BIOCARE's PEROXIDAZED 1.

Pretreatment Solution (recommended): Diva

Pretreatment Protocol:
Heat Retrieval Method:
Retrieve sections under pressure using BIOCARE's Decloaking Chamber, followed by a wash in distilled water. Alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 20 minutes then wash in distilled wat

Protein Block:
Optional: Incubate for 10-15 minutes at RT with BIOCARE's Background Sniper.

Primary Antibody:
Incubate for 30 minutes at RT.

Double Stain Detection:
Incubate for 20-30 minutes at RT using Biocare's MACH 2 Double Stain 2.

Chromogen(1): Incubate for 5 minutes at RT when using BIOCARE's Betazoid DAB.

Chromogen(2):
Incubate for 10-20 minutes at RT with BIOCARE's Vulcan Fast Red.

Counterstain:
Rinse with deionized water. Incubate for 30-60 seconds with Tacha's Automated Hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute.

Technical Note:
This antibody has been standardized with BIOCARE's Double Stain Kit #2. It can also be used on an automated staining system. Use TBS buffer for washing steps.

Performance Characteristics:
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. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

Quality Control:
Refer to NCCLS Quality Assurance for Immunocytochemistry approved guidelines, December 1999 MM4-A Vol.19 No.26 for more information about Tissue Controls.

Precautions:
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)
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.
Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request.

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.

Limitations and Warranty:
There are no warranties, expressed or implied, which extend beyond this description. BIOCARE is not liable for property damage, personal injury, or economic loss caused by this product.

References:
1. Samoszuk MK, Krailo M, Yan QH, Lukes RJ, Parker JW. Limitations of numerical ratios for defining monoclonality of immunoglobulin light chains in B-cell lymphomas. Diagn Immunol. 3(3):133-138, 1985.
2. Bray M, Alper MG. Lambda light chain predominance as a sign of emerging lymphoma. Am. J Clin Pathol. Oct;80(4):526-528, 1983.
3. Sobol RE, Astarita RW, Chisari FV, Griffiths JC, Royston I. Use of immunoglobulin light chain analysis to detect bone marrow involvement in B-cell neoplasms. Clin Immunol Immunopathol. Jul;24(1):139-144, 1982.

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References cont'd:

4. Falini B, De Solas I, Halverson C, Parker JW, Taylor CR. Double labeled-antigen method for demonstration of intracellular antigens in paraffin-embedded tissues. J Histochem Cytochem. Jan;30(1):21-26, 1982.

method for demonstration of intracellular antigens in paraffin-embedded tissues. J Histochem Cytochem. Jan;30(1):21-26, 1982.

5. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."

6. National Committee for Clinical Laboratory Standards (NCCLS). Protection of laboratory workers from infectious diseases transmitted by blood and tissue; proposed guideline. Villanova, PA 1991;7(9). Order code M29-P.

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