RISH™ Lambda Light Chain DNA Probe

Hybridization Probe

Control Number: 903-0005-042913

Catalog Number: **BRA 0005 T**
Description: Approximately 20 tests at 20 microliters per test
Dilution: Ready-to-use
Diluent: N/A

Intended Use:

Analyte Specific Reagent. Analytical and performance characteristics are not established.

Summary & Explanation:

Lambda mRNA may be detected in normal and neoplastic B-cells in human lymphoid tissue (1, 3,5,7,8). Studies have shown restriction of either Kappa or Lambda mRNA denotes monoclonality of lymphoid neoplasms and is useful in distinguishing between neoplastic and reactive lymphoid proliferations (4).

The *in situ* hybridization technique offers an important advantage over immunohistochemistry, as it virtually lacks background, and allows a clean and sharp viewing of the histological preparation. Studies have shown it is also useful to differentiate cells that have absorbed immunoglobulins, and are therefore detectable by immunohistochemistry, but in fact do not produce immunoglobulin, as occurs with the Reed-Sternberg cells of Hodgkin's disease (8).

Clone: N/A
Isotype: N/A
Known Applications:

in situ hybridization (formalin-fixed paraffin-embedded tissues (FFPE)).

Supplied As:

RTU digoxigenin labeled DNA probe in hybridization buffer with nucleic acid carriers.

Storage and Stability:

Store probe at 2ºC to 8ºC. Do not use after expiration date printed on vials. 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.

Analyte Specific Reagent Note:

The RISH™ Lambda Light Chain probe has been quality controlled by Biocare's RISH™ Detection Kit (RI0207KG). However, it is the responsibility of the laboratory or end-user to develop their own protocol and label appropriate disclaimer.

References:

1. Beck RC, Tubbs RR, Hussein M, Pettay J, Hsi ED. Automated colorimetric *in situ* hybridization (CISH) detection of immunoglobulin (Ig) light chain mRNA expression in plasma cell (PC) dyscrasias and non-Hodgkin lymphoma. Diagn Mol Pathol. 2003 Mar; 12(1):14-20.
2. Shaw GR. Non-secretory plasma cell myeloma--becoming even more rare with serum free light-chain assay: a brief review. : Arch Pathol Lab Med. 2006 Aug; 130(8):1212-5.
3. Lee LH, Cioc A, Nuovo GJ. Determination of light chain restriction in fine-needle aspiration-type preparations of B-cell lymphomas by mRNA *in situ* hybridization. Appl Immunohistochem Mol Morphol. 2004 Sep; 12(3):252-8.
4. Stewart CJ, Farquharson MA, Kerr T, McCorriston J. Immunoglobulin light chain mRNA detected by *in situ* hybridisation in diagnostic fine needle aspiration cytology specimens. J Clin Pathol. 1996 Sep; 49(9):749-54.
5. Wilkens L, von Wasielewski R, Werner M, Nolte M, Georgii A. Microwave pretreatment improves RNA-ISH in various formalinfixed tissues using a uniform protocol. Pathol Res Pract. 1996 Jun; 192(6):588-94.
6. Peter J. Delves and Ivan M. Roitt. Immunoglobulin genes. Encyclopedia of Immunology. Pag1323. Second edition. Academic Press Limited (1988)
7. Weiss LM, Movahed LA, Chen YY, Shin SS, Stroup RM, Bui N, Estress P, Bindl JM. Detection of immunoglobulin light-chain mRNA in lymphoid tissues using a practical *in situ* hybridization method. AM J Pathol 1990 Oct; 137 (4):979-88.
8. Ruprai AK, Pringle JH, Angel CA, Kind CN, Lauder I. Localization of immunoglobulin light chain mRNA expression in Hodgkin's disease by *in situ* hybridization. J Pathol. 1991 May; 164 (1):37-40.
9. 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."
10. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory workers from occupationally Acquired Infections; Approved guideline-Third Edition CLSI document M29-A3 Wayne, PA 2005

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