



in situ hybridization simplified



# RSF 200

A simple *in situ* hybridization technology using proprietary DNA probes for rapid visualization of mRNA target expression.

Rapid – Results in approximately 2.5 hours

Simple Procedure – 5 step protocol is as simple as IHC

Sensitive – Proprietary DNA technology for sensitivity & specificity Easy – Simultaneously evaluate gene expression & morphology

Archivable – Chromogenic signal is stable for extended storage

The RISH probe technology enables extremely stable hybridization with the mRNA target, resulting in a more abundant signal and conferring highly specific staining.

The protocol has been simplified by removal of the overnight hybridization, requirement for RNase free solutions, labware and harsh stringent wash conditions resulting in a procedure that is completed in approximately 2.5 hours.

The result is clear, with virtually no background; the chromogenic signal is easily visualized under brightfield microscopy, along with the tissue morphology on a single slide.

## Dual Kappa / Lambda Probe



Enables simultaneous evaluation of immunoglobulin light chain ratios in one tissue section

Allows more accurate and easier assessment of both stains

Restricted expression of a single light chain class is an important indicator of clonality in lymphoid infiltrates

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## Kappa & Lambda Light Chain Probes

Immunoglobulin Light Chains



Differentiate immunoblastic reactions related to viral infections, such as mononucleosis, from lymphoid tumors

Used in the study of monoclonality of lymphoid tumors, lymphoproliferative syndromes, myelomas and immunodeficiency associated lymphoproliferative syndromes

Diagnose mono- or polyclonality in lymphoid tumor proliferation or reactive processes

### CMV Probe

Cytomegalovirus



Detects CMV genomic DNA & mRNA in infected tissues or cells

Transmitted in breast milk, during organ transplantation, sexual activity or blood transfusions

Widely prevalent in the population, CMV is of special concern for immuno-compromised patients

## EBER Probe Epstein-Barr virus Encoded RNA



Detects Epstein-Barr Virus in Reed-Sternberg (RS) Cells

Used to diagnose nasopharyngeal carcinoma

Used to diagnose infectious mononucleosis, lymphoid and nonlymphoid tumors associated with Epstein-Barr viral infection

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## **DNA Control Probes**



#### **Positive Controls**

Used to confirm that test material has intact DNA or mRNA

Weak staining in test sample indicates that specific DNA or RNA target may be compromised

Positive controls are digoxigenin-labeled oligos recognizing Alu repetitive sequences (DNA) or mRNA poly (A) tails (RNA)

## **RNA** Control Probes



#### **Negative Controls**

Used to assess non-specific staining

Lack of staining in test sample confirms good control of non-specific hybridization

Negative controls are digoxigenin-labeled and consist of a set of random oligonucleotides with 40-70% GC content

## **Ordering Information**

Product Name	Status	Volume	Cat. No.
RISH Dual Kappa/Lambda Probe	RUO	0.4 ml	RI0027 T
RISH Kappa Light Chain DNA Probe	ASR	0.4 ml	BRA0004 T
RISH Lambda Light Chain DNA Probe	ASR	0.4 ml	BRA0005 T
RISH Cytomegalovirus (CMV) Probe	ASR	0.4 ml	BRA0011 T
RISH Epstein-Barr Encoded RNA (EBER) Probe	ASR	0.4 ml	BRA0001 T
RISH DNA Positive Control Probe	ASR	0.4 ml	BRA4026 T
RISH DNA Negative Control Probe	ASR	0.4 ml	BRA4027 T
RISH RNA Positive Control Probe	ASR	0.4 ml	BRA4028 T
RISH RNA Negative Control Probe	ASR	0.4 ml	BRA4029 T
RISH HRP Detection Kit	IVD	6 ml	R10207 KG
RISH AP Detection Kit	IVD	6 ml	RIO213 KG
RISH Dual Detection Kit	IVD	6 ml	R10208 KG
RISH Retrieval, 10X	IVD	500 ml	R10209 M

BIOCARE M E D I C A L 800.799.9499 4040 Pike Lane Concord CA 94520

www.biocare.net