

Advancing Cancer Diagnostics
Improving Lives

Leica
BIO SYSTEMS

THE FREEDOM TO DISCOVER



BOND RX

FULLY AUTOMATED IHC AND ISH AND EMERGING TESTS

RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

THE FREEDOM TO DISCOVER

EXPLORE YOUR IDEAS

PUSH THE BOUNDARIES OF WHAT IS POSSIBLE

The BOND RX fully automated research stainer from Leica Biosystems provides superior quality and flexibility whilst enabling the automation of IHC, ISH and emerging tests.



YOUR TEST HERE

IF

IMMUNOFLUORESCENCE

CTC

CIRCULATING TUMOR CELLS

IHC

IMMUNOHISTOCHEMISTRY

TSA

TYRAMIDE SIGNAL AMPLIFICATION

FISH

FLUORESCENCE IN SITU HYBRIDIZATION

ISH

IN SITU HYBRIDIZATION

LNA

LOCKED NUCLEIC ACID

CISH

CHROMOGENIC IN SITU HYBRIDIZATION

TUNEL

TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE DUTP NICK END LABELING ASSAY

miRNA

microRNA

bDNA

BRANCHED DNA ASSAYS

MULTI- PLEX

ENDLESS CUSTOMIZATION OPTIONS

The BOND RX platform provides researchers with the ability to design their ideal protocol. With customization options across all protocol editing segments, the BOND RX enables greater flexibility when optimizing conditions for a variety of test types.

1 PRE-STAINING PREPARATION CUSTOMIZATION

» Customize your dewax options

2 PRE-STAINING CUSTOMIZATION

» Probe application/ removal
» Change Incubation time and temperature

3 STAINING CUSTOMIZATION

» Use your preferred markers
» Create your own detection systems
» Select your dispense type
» Change incubation time and temperature



PRE-STAINING PREPARATION CUSTOMIZATION

Process: IHC ISH
 Marker: DNA Positive Control Probe

Protocols

1 Staining: RX Customized ISH
 Preparation: RX Extended Dewax
 2 HIER: *HIER 5 min with ER1
 Enzyme: *Enzyme 1 for 15 min
 Probe Application: *DEFAULT*
 Denaturation: *...
 Hybridization: *ISH Hybridization (2Hr)
 Probe Removal: *DEFAULT*
 *ISH Probe Removal 1
 *ISH Probe Removal LH

Add slide

PRE-STAINING (ANTIGEN RETRIEVAL) CUSTOMIZATION

BOND RX BOND RX Preferred detection system: Bond Polymer Refine Detection Protocol type: ISH detection

Step N°	Wash	Reagent	Supplier	Ambient	Temperature	Inc. (min)	Dispense type
1		*Peroxide block	Leica Microsystems	✓		5:00	Open
5		*Open 1	User		50	7:30	Open
6		*Anti-Fluorescein Antibody	Leica Microsystems		55	15:00	Selected vol
10		*Post Primary	Leica Microsystems	✓		8:00	Open
14		*Polymer	Leica Microsystems	✓		8:00	Intermediate
18		*Mixed DAB Refine	Leica Microsystems	✓		0:00	150 µL
19		*Mixed DAB Refine	Leica Microsystems	✓		10:00	150 µL
23		*Hematoxylin	Leica Microsystems	✓		5:00	150 µL

Show wash steps Insert wash Insert reagent Delete step

Save Cancel

THE FREEDOM TO DISCOVER

ACCELERATE YOUR TEST PROGRAM

SPEED

MORE OPPORTUNITIES GET TO YOUR END POINT FASTER

The BOND RX's efficient and organized three tray system coupled with simultaneous, optimized, protocol step processing, allows the consistent delivery of 30 slides (IHC) in 2.5 hours.

CONSISTENCY

PROTECT WHAT'S MOST IMPORTANT

For researchers, retaining tissue integrity and morphology is crucial. BOND's unique Covertile system provides total tissue care – consistently.

GENTLE REAGENT APPLICATION

Excellent tissue retention and morphological preservation.



COMMERCIALIZE YOUR DISCOVERY

A CLEAR PATH FROM RESEARCH TO CLINICAL

BOND RX is an open system which provides labs with the flexibility to create customized protocols and streamline the transition from research to clinical.

DEVELOP RUO KITS FOR BOND RX

Work with us on BOND RX reagent kits and pre-installed protocols

COMMERCIALIZE YOUR DISCOVERY

With BOND's shared core technology, there is a pathway for your discovery, whatever your goal - research or clinical.

THE IDEAL BALANCE

Get to your end point faster with the right balance of flexibility and consistency.

FREEDOM AND FLEXIBILITY

- » Open detection/reagents
- » Custom protocols

CONSISTENT RESULTS

- » Standard bulk reagents
- » Run-to-run consistency



EFFICIENCY

REDUCING THE BARRIERS TO YOUR DISCOVERY



FLEXIBLE TEST MANAGEMENT

Antibodies, probes and detection systems can be accessed at any time.



RELIEVING THE STRAIN

- » Minimal maintenance
- » Fill bulk reagents during runs
- » Low waste volumes



YOUR NEXT STEP ILLUMINATED

Ascertain bulk reagent levels and status changes at a glance with BOND RX's unique active lighting system.

- » Fill bottles anytime.

DEVELOP BOND KITS

Join companies like ACD who have successfully commercialized tests that integrate with the BOND system.

- » Tap into the large BOND install base
- » Run your assay effectively and efficiently
- » Have your protocols included as part of the BOND standard offering – drive customer adoption through easy access



THE FREEDOM TO DISCOVER

ACCESS TO NEW TESTS FROM A RANGE OF PARTNERS

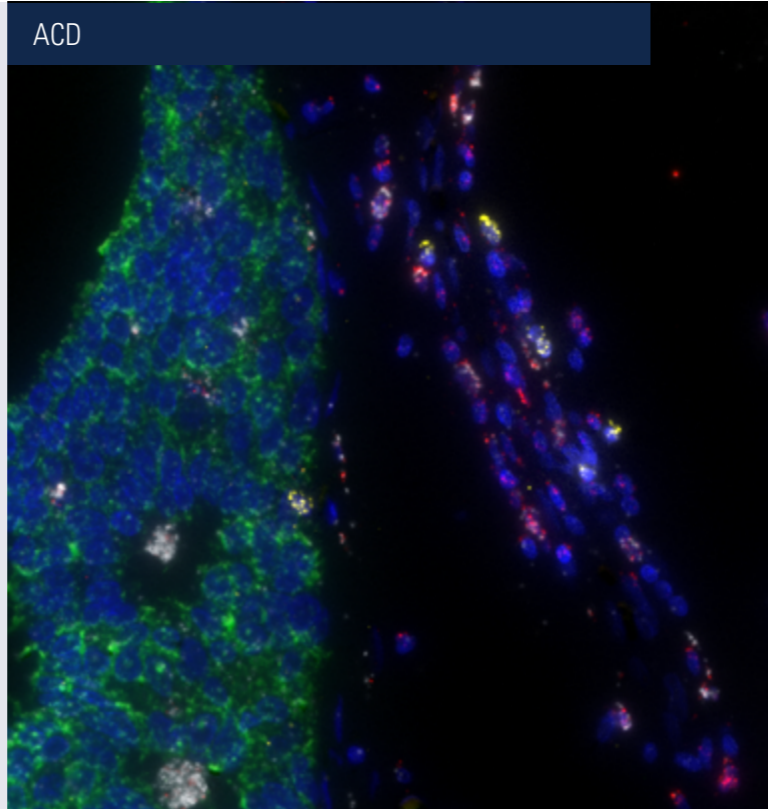
Leica Biosystems joins forces with a range of Open Innovation (OI) partners to provide you with flexible solutions for your research: from DNA to RNA to protein to CTCs, our aim is to give you the broadest breadth of test options, and research targets, possible. All protocols and protocol templates developed in conjunction with our OI partners is made available to all, so that you can access the latest advances in research in the shortest time possible.

ACD

FULLY INTEGRATED RNA ISH SOLUTION WITH WORLD-CLASS SUPPORT

With walkaway, high-throughput staining, researchers can now complete 30 slides in a single 11-hour run for single plex and 14-hour run for duplex

- » Highly specific – Signal amplification using double z probe strategy coupled with simultaneous background suppression strategy ensures target-specific binding
- » Sensitive & Quantitative – Single RNA molecule detection at single cell resolution
- » Morphological Context – Cell specific expression in information intact tissue architecture
- » Universal – For virtually any gene, any species, any tissue



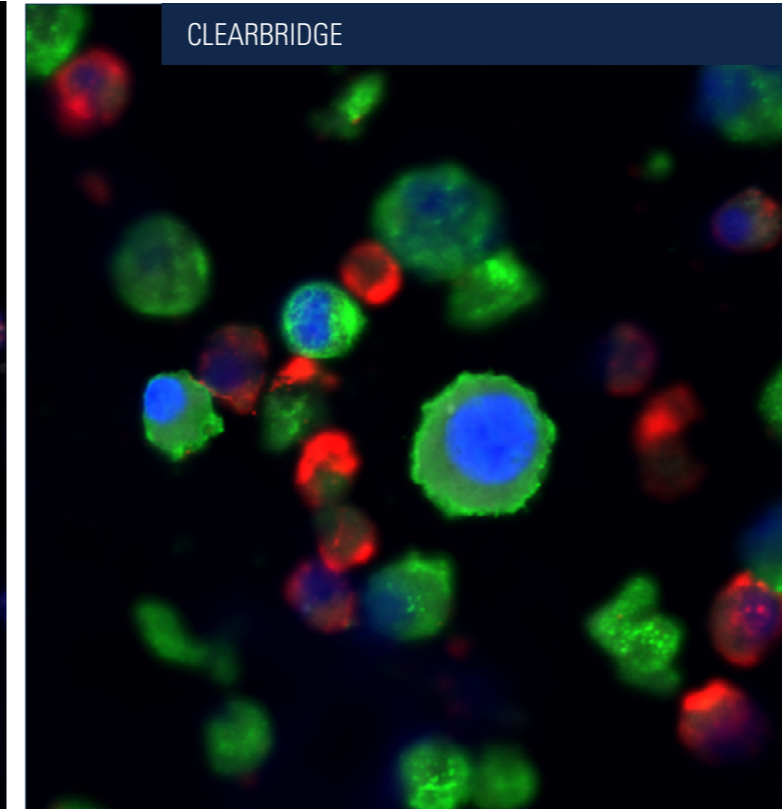
CLEARBRIDGE

CLEARBRIDGE

FURTHER YOUR STUDY OF METASTASIS AND RESIDUAL CANCERS

The Clearbridge CTC Enrichment Analysis combined with the BOND RX platform, provides researchers with a solution to identify early, metastatic or residual cancers through the staining of enriched CTC cells from blood, rather than the physical tumor.

- » Label-free CTC enrichment of heterogeneous populations of cancer cells
- » Up to 10,000x enrichment of CTCs that are wholly intact viable and assay ready
- » Large blood volume enrichment from 7.5 mL of a patient's blood

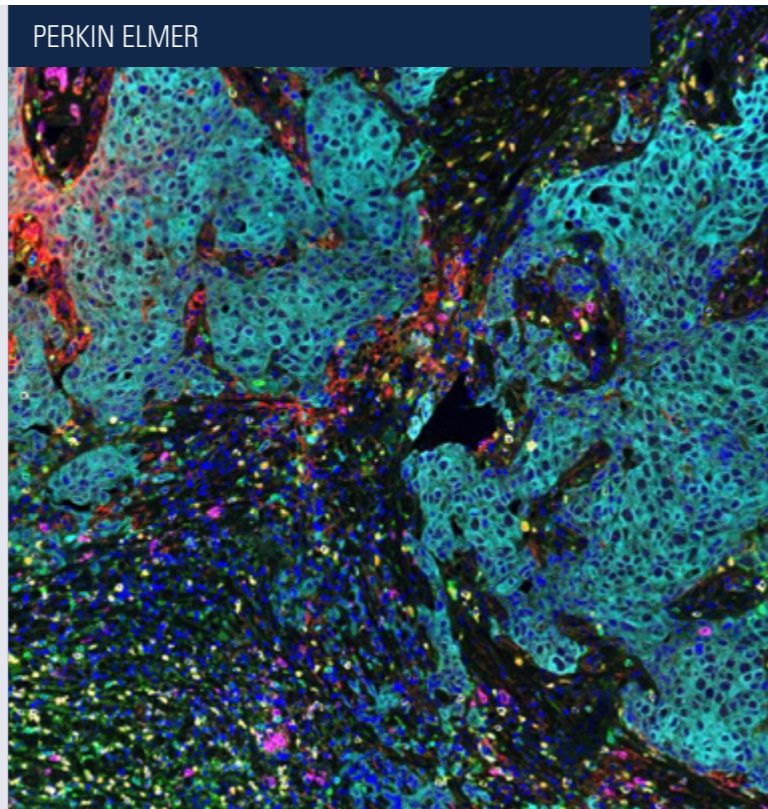


PERKIN ELMER

MAKE "WALK-AWAY" MULTIPLEX STAINING A REALITY

Produce up to 30 beautiful, seven-color immunofluorescence slides in about 14 hours without intervention.

- » Simultaneously visualize up to six tissue biomarkers plus a nuclear counterstain
- » Use the best primary antibodies, regardless of species – with no crosstalk
- » Editable protocol is easily optimized to meet your specific needs



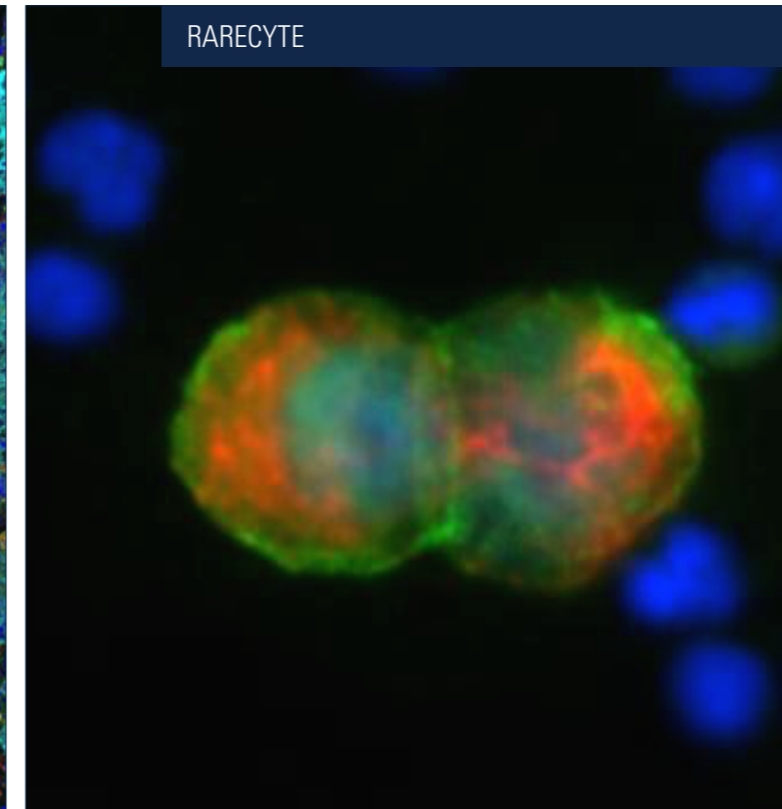
RARECYTE

RARECYTE

BRINGING CTC ANALYSIS TO THE EXPERIMENTAL PATHOLOGY LAB

The AccuCyte-Cytefinder system integrates with the fully automated BOND RX research stainer for microscopic visualization of circulating tumor cells (CTCs). The system specializes in single cell retrieval of target cells for downstream genomic analysis.

- » AccuCyte comprehensively collects nucleated cells - including CTC's from whole blood.
- » CyteSealer creates a barrier between the buffycoat and red blood cells – making collection seamless.
- » The CyteSpreader tool ensures the precise amount of nucleated cells is spread onto a slide every time.





RESEARCH-FOCUSED SOFTWARE

The BOND RX User Interface has a workflow and terminology tailored for research.

The research-focused software is easy to learn, new assays are quick to set up and the incredibly flexible software makes for straight-forward assay optimization and customization.

SYSTEM SPECIFICATIONS

Dimensions	790 mm (W) x 1378 mm (H) x 806 mm (D) 31.10 in (W) x 54.25 in (H) x 31.73 in (D)
Weight (dry)	238 kg 525 lbs
Slide capacity	30 slides Finished trays (10 slides) may be replaced continuously
Reagent container capacity	Titration, 7 mL and 30 mL
Number of reagent containers	36 reagents
Bulk reagent container capacity	2 L or 5 L
Hazardous waste container capacity	5 L
Standard waste container capacity	2 x 5 L

VISION 24

- IMPROVED QUALITY
- INTEGRATED SOLUTIONS
- OPTIMIZED EFFICIENCY

LEICA BIOSYSTEMS

Leica Biosystems (LeicaBiosystems.com) is a global leader in workflow solutions and automation, integrating each step in the workflow. As the only company to own the workflow from biopsy to diagnosis, we are uniquely positioned to break down the barriers between each of these steps. Our mission of “Advancing Cancer Diagnostics, Improving Lives” is at the heart of our corporate culture. Our easy-to-use and consistently reliable offerings help improve workflow efficiency and diagnostic confidence. The company is represented in over 100 countries and is headquartered in Nussloch, Germany.

Leica Biosystems – an international company with a strong network of worldwide customer services.

For detailed contact information on your nearest sales office or distributor please visit our website: LeicaBiosystems.com

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