

# Cytology

quality, reliable  
laboratory  
solutions



## Adopt efficiency, maintain integrity

Epredia Cytospins and consumables have been synonymous with cytocentrifugation for over 40 years. Used in laboratories around the world, they have enabled laboratories to process cytology samples efficiently, providing economical thin-layer preparations from any liquid matrix.

### Reliable Quality

- Maintain cellular integrity and carefully separate and deposit cells in a monolayer
- Ready-to-use reagents for quick turn around time

### Adaptive and Convenient

- Use for cytology, virology, microbiology, hematology oncology, and research/general use
- Removable program card allows for up to nine programs to be logged

### The Total Solution

- Enhance the use of your Cytospin with a wide variety of high quality Epredia cytology consumables, including funnels, slides, and fixation solutions
- Get peace of mind with Epredia extended service contracts that include preventative maintenance and thorough, expedited repairs, ensuring minimal downtime in your laboratory



## Cytospin 4 Cytocentrifuge



The Cytospin™ 4 cytocentrifuge has been synonymous with cytocentrifugation for over 40 years and is used in laboratories around the world.

When combined with EpreDia cytology consumables, it provides economical thin-layer preparations from any liquid matrix, especially hypocellular fluids such as spinal fluid and urine.

### Convenience and Speed Spun into One

- Process twelve specimens at one time, allowing for several protocols at once
- Accepts all protocols from previous generations of Cytospin cytocentrifuges
- Lid release mechanism allows for one-handed opening and closing
- Removable program card allows for up to nine programs to be logged for fast and convenient reference, and protected program memory stores up to 23 routines for instant recall
- Control panel allows user to control power and time, and monitor speed
- Specimen safety alarm feature reminds users at one-minute intervals to remove specimens, protecting them from air-drying

### Simple Principle for Excellent Presentation

- Using centrifugal principles, the cytocentrifuge deposits cells onto a clearly defined area of a glass slide and allows for the absorption of the residual fluid into the sample chamber's filter card
- Cytocentrifugation constructively flattens cells for excellent nuclear presentation
- The instrument's spinning action tilts the Cytofunnel sample chamber upright and centrifuges cells onto the deposition area of the slide, creating a cellular monolayer that provides all cell types equal opportunity for presentation
- In the "load" or "stop" position, this unique tilting feature reduces cell loss by preventing residual fluid from coming into contact with the prepared slide

### Designed for User Safety

- Only operates when the lid is locked and remains locked during rotation
- Polycarbonate window allows the operator to see the sealed head during cytocentrifugation

### Physical Specifications

Dimensions (D x W x H):  
With closed lid:  
24.5 x 16 x 9.5 in. (62 x 40.5 x 24 cm)

With open lid:  
24.5 x 16 x 25 in. (62 x 40.5 x 62.5 cm)

Weight:  
26.5 lbs / 12 kg

Power Requirements:  
100-240 V, 50/60Hz, 150 VA, 5A  
250 V, T5A 250 V

### Includes:

Cytospin 4 cytocentrifuge, sealed head/rotor, marking pen, operator guide, service record book and standard workflow diagram.

## Multiple Applications:

### Research/General Use

- A cost-effective and time-effective way to make quality thin-layer cell preparations
- Excellent for molecular studies, specialized staining applications and EM
- Used in veterinary, dental and chemosensitivity protocols

### Cytology

- Excellent performance for non-gynecological cytology, especially hypocellular fluids
- Variety of collection fluids and funnel options available
- Prepares both air-dried and fixed specimens
- Can be used for liquid-based cytology (LBC) applications

### Microbiology

- Microorganisms are often present in low numbers from limited sample volumes; Cytocentrifugation effectively spins the microorganisms onto the slide, maximizing the yield and presenting those organisms in a clean, defined area, allowing for straightforward morphological identification
- Only a small sample volume is needed so multiple samples may be run for a variety of special staining and support testing procedures
- Concentrates samples for Gram stains

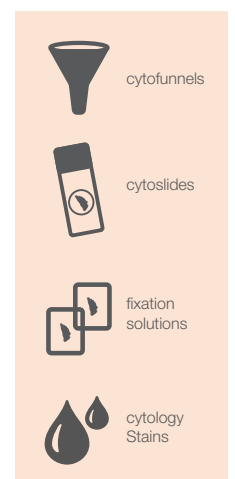
### Hematology/Oncology

- Easy to achieve a constant cell/unit volume
- Excellent for all fluids, bone marrow and peripheral blood

Description	Order Number
Cytospin 4 unit only	A78300003
EZ Funnel starter kit	A78710013
Clipped Funnel starter kit	3120110

Accessories	Order Number
Additional sealed head	59910018
Sealed head seals (3 / pack)	5991019
Service manual	A7831251

### You'll need:



# Shandon EZ Cytofunnel Sample Chambers

## EZ Cytofunnel™ General Features

- For single use with all EpreDia Cytospin cytocentrifuge applications
- Optimizes cell yield
- Produces cost-effective, thin-layer preparations
- Reduces the risk of exposure to pathogenic samples
- Disposable to eliminate time-consuming decontamination and cleaning
- Decreases the possibility of cross-contamination
- Eliminates the need for metal Shandon™ Cytoclips™ slide clip



### Shandon EZ Single Cytofunnel with White Filter Cards

Shandon™ EZ Single Cytofunnel™ is a disposable sample chamber with white filter card and cap. Made for high absorbency.

- Use for sample volumes from 0.1-0.5 mL
- Cell deposition area of 6 mm in diameter (28 mm<sup>2</sup>)
- Pre-attached white filter card for high absorbency

Qty	Order Number
40 / box	A78710003
200 / case	A78710020



### Shandon EZ Single Cytofunnel with Brown Filter Cards

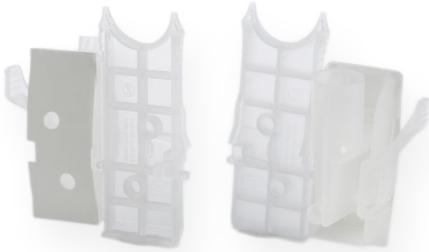
Shandon EZ Single Cytofunnel is a disposable sample chamber with brown filter card and cap. Made for slower absorbency.

- Use for sample volumes from 0.1-0.4 mL
- Cell deposition area of 6 mm in diameter (28 mm<sup>2</sup>)
- Pre-attached brown filter card for slower absorbency; increases cell yield
- Excellent for hypocellular specimens such as cerebrospinal fluid

Qty	Order Number
40 / box	A78710004

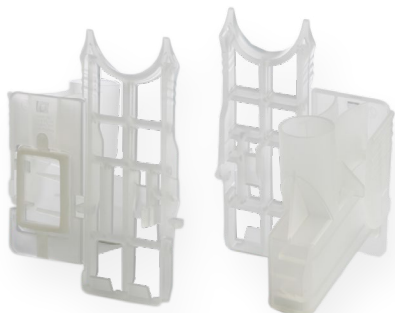
### Shandon EZ Double Cytofunnel

Shandon™ EZ Double Cytofunnel™ is a disposable sample chamber with white filter card and cap.



- Use for sample volumes from 0.05-0.25 mL per chamber
- Allows two sample deposition areas on a single slide; each area measures 6 mm in diameter (28 mm<sup>2</sup>)
- Double the number of sample presentations per run
- Funnel markings correspond to slide markings for simple identification
- Pre-attached white filter card for high absorbency
- Ideal for use with immunochemistry techniques

Qty	Order Number
40 / box	A78710005
200 / case	A78710021



## Shandon EZ Megafunnel with Cap and Slide

Shandon™ EZ Megafunnel™ is a disposable, high-volume sample chamber with cap.

- Designed for spinning large samples from 0.5-6 mL
- Cell deposition area of 22 x 14.75 mm (325 mm<sup>2</sup>) for increased cell yield
- Minimizes the need to pre-centrifuge
- Prepares both air-dried and fixed preparations, providing additional valuable diagnostic information

Qty	Order Number
25 / box	A78710001

# Shandon Cytofunnels

## Cytofunnel General Features

- Fit snugly against a specially marked Cytoslide
- Held in place with a stainless steel Cytoclip
- Cytoclips easily unlock to dispose of the sample chamber and to remove the slide
- Twelve assemblies fit into the Cytospin head
- Include caps and easy-to-use operational illustrations



## Shandon Single Cytofunnel with White Filter Cards

Shandon Single Cytofunnel is a disposable sample chamber with white filter card and cap. Made for high absorbency.

- Use for sample volumes from 0.1-0.5 mL
- Cell deposition area of 6 mm in diameter (28 mm<sup>2</sup>)
- Pre-attached white filter card for high absorbency
- Requires the use of stainless steel Cytoclips

Qty	Order Number
50 / box	5991040
500 / case	1102548



## Shandon Single Cytofunnel with Brown Filter Cards

Shandon Single Cytofunnel is a disposable sample chamber with brown filter card and cap. Made for slower absorbency.

- Use for sample volumes from 0.1-0.4 mL
- Cell deposition area of 6 mm in diameter (28 mm<sup>2</sup>)
- Pre-attached brown filter card for slower absorbency; increases cell yield
- Excellent for hypocellular specimens such as cerebrospinal fluid
- Requires the use of stainless steel Cytoclips

Qty	Order Number
50 / box	5991043



## Shandon Double Cytofunnel



Shandon Double Cytofunnel is a disposable sample chamber with white filter card and cap.

- Use for sample volumes from 0.05-0.25 mL per chamber
- Allows two sample deposition areas on a single slide; each area measures 6 mm in diameter (28 mm<sup>2</sup>)
- Funnel markings correspond to slide markings for simple identification
- Pre-attached white filter card for high absorbency
- Ideal for use with immunochemistry techniques
- Requires the use of stainless steel Cytoclips

Qty	Order Number
25 / box with caps	5991039
500 / case	1102547

## Shandon Cytoclip Stainless Steel Slide Clip



Shandon™ Cytoclip™ Stainless Steel Slide Clips hold the Cytofunnel sample chamber against the microscope slide during cytocentrifugation.

- For preparation in the Cytospin cytocentrifuge
- Autoclavable and reusable

Qty	Order Number
6 / box	59910052



### Shandon TPX Single Sample Chamber, Caps, and Filter Cards

Shandon TPX Single Sample Chamber is a reusable sample chamber used in conjunction with a closure cap, Cytoclip and disposable filter card.

- Use with disposable white filter cards for routine sample volumes from 0.1-0.5 mL
- Use with disposable brown filter cards for hypocellular sample volumes from 0.1-0.4 mL or less
- Reusable
- Autoclavable

### Filter cards

Highly absorbent disposable filter cards for use with TPX chamber

- Not for use with Cytofunnel disposable sample chambers
- Each filter card has two holes to ensure proper orientation with the TPX sample chamber
- White filter cards are used for high absorbency
- Brown filter cards are used for slower absorbency (hypocellular)

Description	Qty.	Order Number
TPX sample chamber	12 / case	A78710018
Closure caps	12 / case	59910025
Brown filter cards	200 / box	5991023
White filter cards	200 / box	5991022

## Shandon Cytoslides

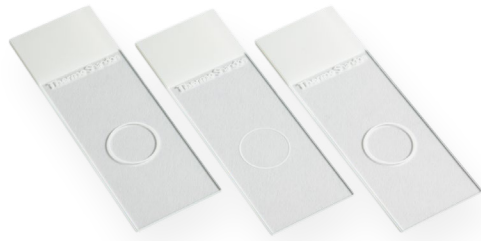
### General Features

- Specimen area is outlined for rapid location during screening
- Made from fine white glass, manufactured to high quality standards
- Slides are pre-cleaned, thin, flat, and feature finely ground edges.

### Coated Cytoslides

- Eliminate the need for albumin coating procedures
- Save labor and resource time
- Coated adhesion Cytoslides are designed to secure cytology preparations
- Coating features a chemistry based on silane

Contact your sales representative for more information.



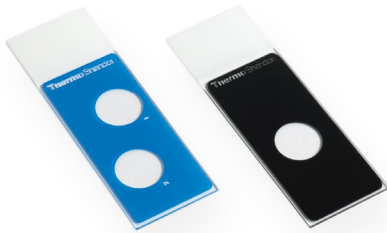
### Shandon Single Cytoslides

- Improve processing and visualization of small-volume specimens with Shandon™ Single Cytoslides™, for use with EZ Single Cytofunnels
- Slides feature a white tab and 13 mm diameter ring that defines the cell display area to allow for efficient and rapid location
- Uncoated single 13 mm ring Cytoslides are available with the ring on front or back of slide
- Coated single 13 mm ring Cytoslides feature the ring on the back of slide only



### Shandon Double Cytoslides

- Use Shandon™ Double Cytoslides™ with EZ Double Cytofunnel Chambers
- Slides feature a blue tab and two blue 13 mm diameter rings that define the cell display area to allow for efficient and rapid location
- Each specimen is displayed within a numbered ring marked as 1 or 2 that corresponds with the Cytofunnel chamber
- Uncoated and coated double 13 mm ring Cytoslides are available with the rings on back of slide only



### Shandon Mask Cytoslides

- Mask out UV light to restrict microscope viewing to the specimen with Shandon™ Mask Cytoslides™
- Shandon Mask Cytoslides are used for immunofluorescence and feature white tabs
- Single Mask Cytoslides features a black mask printed on front of slide with one 13 mm well
- Double Mask Cytoslides features a blue mask printed on front of slide with two 13 mm numbered wells

## Shandon Fixation Solutions

### Richard-Allan Scientific Papanicolaou Stain EA

- Richard-Allan Scientific Papanicolaou Stain EA provides brilliant cytoplasmic staining for gynecological and non-gynecological specimens
- Different formulations offer the user control of the color intensities and hues
- EA-36 and EA-50 are used in conjunction with OG-6 for gynecological staining
- EA-65 is used with OG-6 for non-gynecological staining
- Modified EA is a Gill modification that minimizes precipitation, reduces staining time and does not contain Bismarck Brown; designed to be used with Modified OG

Description	Qty.	Order Number
<b>EA-36</b>		
1 pint (0.47 L)	4 / case	75411
1 gal (3.8 L)	ea.	75411
<b>EA-50</b>		
1 pint (0.47 L)	4 / case	75504
1 gal (3.8 L)	ea.	75511
2.5 gal cube (9.5 L)	ea.	75525
<b>EA-65</b>		
1 pint (0.47 L)	4 / case	75604
1 gallon (3.8 L)	ea.	75611
2.5 gal cube	ea.	75625
<b>Modified EA</b>		
1 pint (0.47 L)	4 / case	75704
1 gal (3.8 L)	ea.	75711



### Richard-Allan Scientific Mucolytic Agent

- Richard-Allan Scientific Mucolytic Agent is specially formulated to preserve and liquefy mucoid cytology specimens to optimize diagnostic results
- Maintains cell morphology and staining characteristics of fresh and unfixed cytology specimens
- Specimens may be stored within this solution indefinitely with no adverse effects
- Tinted for easy specimen identification

Description	Qty.	Order Number
1 pint (0.47 L)	4 / case	76166
1 gal (3.8 L)	ea.	76167



### Richard-Allan Scientific Saccomanno Fluid

- Richard-Allan Scientific Saccomanno Fluid is a general purpose cytology fixative especially suited for upper respiratory tract specimens - most notably, sputum
- Ready-to-use fixative is an alcohol and polyethylene glycol (Carbowax™) solution
- Permits storage of specimens for weeks
- Prevents air-drying artifact
- Clear containers and tinted solution make specimen identification easy
- Each prefilled container is labeled with a “do not drink” warning, as specimens may be collected at home

Description	Qty.	Order Number
120 mL	72 / case	76160
1 gal (3.8 L)	ea.	76161



### Richard-Allan Scientific Fix-Rite 2

- Richard-Allan Scientific™ Fix-Rite™ 2 solution is a Carbowax™- containing spray fixative used for routine cytological preparations
- Coating protects cells when mailing or transporting slides to the laboratory; prevents air-drying artifact
- Packaged in 4 oz containers to allow the user complete control during application

Description	Qty.	Order Number
Pump spray bottle	12 / case	76150

# Richard-Allan Scientific Cytology Stains



## Signature Series Cyto-Stain

Richard-Allan Scientific™ Signature Series Cyto-Stain™ is a uniquely formulated cytoplasmic stain that produces results similar to conventional Papanicolaou stains.

- Cyto-Stain provides a full range of familiar cytoplasmic colors and allows the user control over the staining intensities
- Cyto-Stain G is a modification to produce greener cyanophilic hues in intermediate and basal cells
- Use for all gynecological and non-gynecological procedures
- Cost-effective because user performs only one counterstain, not two
- Reduces staining time

Description	Qty.	Order Number
<b>Cyto-Stain</b>		
1 pint (0.47 L)	4 / case	7511
1 gal (3.8 L)	ea.	7501R
<b>Cyto-Stain G</b>		
1 gal (3.8 L)	ea.	7501G

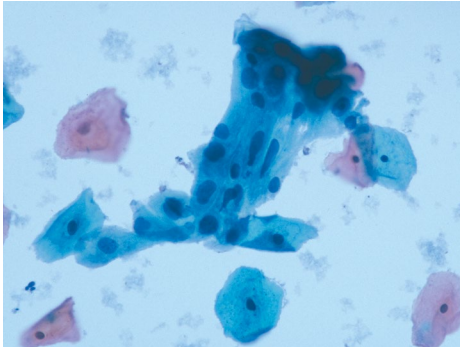
## Signature Series Cyto-Stain

Richard-Allan Scientific Papanicolaou Stain OG-6 stains are used to stain keratinized areas of the cell.

- Modified OG is a Gill modification that minimizes precipitation and reduces staining time
- Use OG stains with EA-36 or EA-50 when staining gynecological specimens
- Use OG stains with EA-65 for staining non-gynecological specimens

Description	Qty.	Order Number
<b>OG-6</b>		
1 pint (0.47 L)	4 / case	75204
1 gal (3.8 L)	ea.	75211
2.6 gal cube (9.5 L)	ea.	75225
<b>Modified OG</b>		
1 gal (3.8 L)	ea.	75311

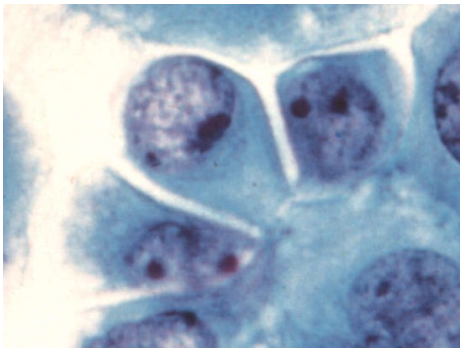
## Shandon Cytology Stains



### Shandon EA-50 Stain

- Clearly differentiates cellular components with pink, green and blue-green hue
- Polychromatic cytoplasmic stain

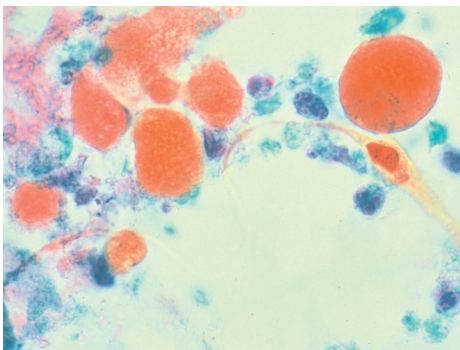
Description	Qty.	Order Number
1 L (0.26 gal)	2 / case	6766001
4 L (1.06 gal)	ea.	6766002



### Shandon EA-65 Stain

- Clearly differentiates cellular components with pink, green and blue-green hue
- Polychromatic cytoplasmic stain
- Lower concentration of light green improves expression of eosin-stained components

Description	Qty.	Order Number
1 L (0.26 gal)	2 / case	6766003
4 L (1.06 gal)	ea.	6766004



### Shandon OG-6 Stain

- Demonstrates keratin in cytoplasm

Description	Qty.	Order Number
1 L (0.26 gal)	2 / case	6766005
4 L (1.06 gal)	ea.	6766006



# Shandon Cytology Consumables



## Shandon Cytospin Collection Fluid

Shandon Cytospin Collection Fluid is packaged in several forms, including convenient pump bottle or pre-filled specimen containers.

- Ready-to-use alcohol/Carbowax polyethylene glycol combination for direct specimen collection and fixation
- Permits storage of specimens or unstained slides for weeks without adverse effect

Description	Qty.	Order Number
<b>Pump Bottle</b>		
4 L (1.06 gal)	ea.	6768001
<b>Bottle</b>		
500 mL (0.13 gal)	2 / case	6768315
10 L (2.64 gal) cubitainer	2 / case	9990310
<b>Cups</b>		
120 mL, filled to 60 mL	125 / case	9990323



## Shandon Cell-Fixx Spray Adhesive

Shandon™ Cell-Fixx™ Spray Fixative allows for convenient preparation of slides.

- Includes Carbowax, which coats the smear to maintain cellular detail
- Prevents air drying artifact and cell loss
- Supplied in pump bottle

Description	Qty.	Order Number
50 mL	6 / case	6768326



### Shandon CytoRich Red Collection Fluid

Shandon™ CytoRich™ Red Collection Fluid lyses RBC's and solubilizes proteins.

- Ready-to-use, alcohol-based fluid
- Compatible with immunohistochemistry
- Pre-filled containers and pre-filled vials available

Description	Qty.	Order Number
<b>Bottle</b>		
500 mL (0.13 gal)	2 / case	B9990801
4 L (1.06 gal)	ea.	B9990800
<b>Pre-filled Cups</b>		
20 mL, filled to 10 mL	180 / case	B9990802
120 mL, filled to 60 mL	125 / case	B9990803
<b>Pre-filled Vials</b>		
50 mL, filled to 15 mL (AMER)	100 / case	B9990804
50 mL, filled to 15 mL (APAC)	100 / case	B9990804CR



### Shandon Mucolexx

- Liquefies (with agitation) mucoid cytology specimens
- Maintains cellular detail
- Short-term preservation of specimens
- Ready-to-use mucoliquefying preservative

Description	Qty.	Order Number
<b>Bottle</b>		
500 mL (0.13 gal)	2 / case	9990370
4 L (1.06 gal)	ea.	9990371
<b>Cups</b>		
120 mL, filled to 60 mL	50 / case	9990375

## Shandon Cell Preparation Systems



### Shandon Octospot

Shandon™ Octospot™ is a cell preparation system used in conjunction with the EpreDia Cytospin for studies involving small volume samples.

- Cytocentrifuge cells from 8-well microliter strips directly onto a microscope slide (96 spots per spin); turn eight slides into one
- Incorporates an 8-well strip, an 8-well slide, a holding block and a filter card assembled in a standard stainless steel Cytoclip
- Solvent-resistant slides retain separate reagents in individual wells to prevent cross-contamination

Description	Qty.	Order Number
Thick-filter cards	100 / pack	1001641
8-well strips, loose	60 / bag	1001642
Solvent-resistant slides, 8 spots	100 / box	1001645
Coverglass, 22 x 70 mm, #1.0 thickness	1 oz / pack x 10	1001624



### Shandon Cytoblock Cell Block Preparation System

Shandon™ Cytoblock™ Cell Block Preparation System is used in conjunction with the Cytospin and facilitates processing of FNA's, tissue fragments and cell buttons.

- Increases ability to process scanty or unseen material for cell block and reduces loss of critical material
- Replaces time-consuming, costly agar and thrombin techniques
- Requires phosphate-free fixative on processor, such as Zinc Formal-Fixx™, Formal-Fixx or Glyo-Fixx™ (formalin substitute) fixatives; or manually fix and bypass phosphate-buffered formalin fixation steps on processor
- Processes 50 specimens and includes 50 Cytoblock cassettes with inserts, one bottle of Setting Reagent and one bottle of Gelling Reagent
- Suitable for immunohistochemical techniques

Description	Order Number
Cytoblock cell block kit	7401150
Replacement reagents	7401151