

Parasitology

Table of Contents

- 1 Books
- 2 Parasitology Transports
- 6 Total Fix Procedure
- 7 Fecal Concentrating Systems
- 8 Centrifuge Tubes
- 9 Stains and Reagents
- 11 Staining Accessories
- 12 Control Slides for Stains
- 13 Parasite Suspensions
- 14 Culture Media
- 15 11 Ways to Make a Better Slide
- 17 Microscope Supplies
- 19 Rapid Tests





A Culture of Service"

Headquarters

1430 West McCoy Lane Santa Maria, CA 93455 800.266.2222 : phone 805.346.2760 : fax Sales@HardyDiagnostics.com www.HardyDiagnostics.com

Distribution Centers

Santa Maria, California Olympia, Washington Salt Lake City, Utah Phoenix, Arizona Dallas, Texas Springboro, Ohio Lake City, Florida Albany, New York Raleigh, North Carolina

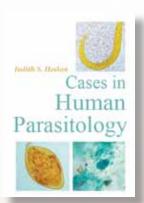


ISO 13485 FM 572526

The Quality Management System at the Hardy Diagnostics manufacturing facility is certified to ISO 13485.

Copyright © 2014 Hardy Diagnostics

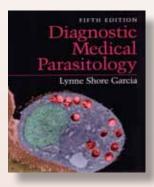
Books



Cases in Human Parasitology

This book contains 62 case studies that focus solely on parasites which adversely affect humans. Challenging cases with details regarding non-parasitic infections whose symptoms closely resemble those of parasitic infections are included.

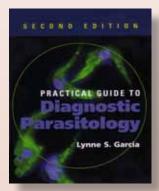
By Judith S. Heelan, 256 pages, softcover, ASM Press, 2004, Each......5812961



Diagnostic Medical Parasitology

This book contains updates and advances in the field of diagnostic medical parasitology and reports on the dramatic changes that have occurred in this field. Newly recognized parasites, alternative diagnostic techniques defined by new regulatory requirements, implementation of testing based on molecular techniques, expanded tables and photographs, and new information on parasitic infections are included.

By Lynne S. Garcia, 1,202 pages, color photos, hardcover, American Public Health Association Publishing, 2007, Each.......5813802



Practical Guide to Diagnostic Parasitology, 2nd Edition

Designed as a training aid and reference for lab technicians, this guide supplements standard clinical parasitology textbooks by focusing on practical information that has direct application to benchwork. It is also loaded with procedures based on the author's 30 years of hands-on experience in clinical laboratories. This book helps readers perform accurate diagnostic tests and avoid common pitfalls.

By Lynne S. Garcia, 367 pages, softcover, ASM Press, 2009, Each......5814540

Parasitology Transports

| | Product | Packaging | Cat. no. |
|--------------|--------------------------------|----------------|----------|
| | Cu-PVA | 100 vials/case | 280105 |
| | LV-PVA | 100 vials/case | 280205 |
| | Z-PVA™ (zinc sulfate modified) | 100 vials/case | 280305 |
| | UNIFIX | 100 vials/case | 280405 |
| | C&S Medium | 100 vials/case | 280505 |
| IALS | Clean Vial | 100 vials/case | 31005 |
| SINGLE VIALS | SAF | 100 vials/case | 57405 |
| SINC | Formalin 10% | 100 vials/case | 57505 |
| | TOTAL-FIX™* | 100 vials/case | 280705 |
| | TOTAL-FIX™/Clean* | 50 kits/case | 89025 |
| 13 | TOTAL-FIX™/C&S* | 50 kits/case | 89024 |
| VIAL SETS | LV-PVA / Clean | 50 kits/case | 89001 |
| TWO VIA | LV-PVA / Formalin | 50 kits/case | 89002 |
| | LV-PVA / SAF | 50 kits/case | 89003 |
| | LV-PVA / C&S | 50 kits/case | 89004 |









| | Product | Packaging | Cat. no. |
|-----------------|---------------------------|--------------|----------|
| | Z-PVA™ / Clean | 50 kits/case | 89005 |
| | Z-PVA™ / Formalin | 50 kits/case | 89006 |
| ۶n | Z-PVA™ / C&S | 50 kits/case | 89007 |
| VIAL SETS | SAF / Clean | 50 kits/case | 89008 |
| TWO VIAI | SAF / C&S | 50 kits/case | 89009 |
| | Cu-PVA / Formalin | 50 kits/case | 89010 |
| | Z-PVA™ / SAF | 50 kits/case | 89011 |
| THREE VIAL SETS | TOTAL-FIX™/C & S/Clean | 36 kits/case | 89117 |
| | LV-PVA / Formalin / C&S | 36 kits/case | 89101 |
| | LV-PVA / Formalin / Clean | 36 kits/case | 89102 |
| | Z-PVA™ / Formalin / C&S | 36 kits/case | 89103 |
| | Z-PVA™ / Formalin / Clean | 36 kits/case | 89104 |
| | SAF / Clean / C&S | 36 kits/case | 89105 |



A Culture of Service[™] Parasitology

C&S Medium

Culture & Sensitivity medium is recommended for the recovery of Shigella, Salmonella, Campylobacter, and Vibrio species. A pH indicator is included to detect acidic conditions which are harmful for the recovery of enteric pathogens. C&S is an aqueous solution of sodium thioglycollate, agar, and inorganic salts (Cary-Blair formula). Fecal immunoassays for Entamoeba histolyca or Entamoeba

100/case......280505

Z-PVA™

Zinc Sulfate PVA mercury-free fixative is an excellent alternative to mercuric chloride PVA for permanent staining. An aqueous solution of low viscosity polyvinyl alcohol, acetic acid, reagent alcohol, and a zinc salt helps to adhere specimen to the slide but has no fixative properties.

100/case......280305

Modified (Cu) PVA Fixative

Modified copper sulfate PVA is used for permanent staining. This replaces mercuric chloride; an aqueous solution of low viscosity polyvinyl alcohol, acetic acid, reagent alcohol, and cupric sulfate.

100/case......Z80105

LV-PVA

Formalin 10%

Fixative recommended for preservation of fecal material is used in concentration, EIA, IFA, DFA, and concentration wet mount procedures.

. 100/case......57505

SAF

Sodium acetate, acetic acid, and formalin, mercury-free fixative is recommended for permanent staining, concentration, membrane flow cartridges, EIA, and ELISA procedures. SAF includes albumin adhesive and a buffered solution of formaldehyde in water.

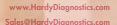
100/case......57405







* PATENT NO. 8,338,130





Clean Vial

30ml vial with spork in cap is used when preservatives are not required.

100/case.....31005

TOTAL-FIX™*

The "universal fixative" that contains no formalin, PVA, or mercury can be used for concentration (either flotation or sedimentation), permanent staining (Trichrome, Iron-Hematoxylin, Modified Acid-fast, Modified Trichrome), and fecal immunoassays (EIA, DFA, IFA, Membrane Flow Cartridges) other than those testing for Entamoeba histolyca/E. dispar group. PVA is not needed with TOTAL-FIX™ if the slides are thoroughly dry before staining. TOTAL-FIX™ is the best choice for a universal and reliable fixative! See following page for procedure. 100/case.....280705

UNIFIX

This is a mercury and formaldehydefree fixative used for direct examination, permanent staining, concentration, and DFA procedures. UNIFIX can be used with trichrome and iron hematoxylin stains and is compatible with all Medical Chemical Corporation's fecal concentration systems. 100/case......280405

Pinworm Paddle

Ideal for the collection of Enterobius ova (pinworm eggs) from the perianal region. This paddle is made of clear polystyrene with light adhesive on one side, allowing easy collection of ova. Container is leak proof and can be transported in harsh conditions. With transport vial, sterile, polypropylene, 30ml, 150/case......V302PIN

Note: For best results, all fecal fixatives should be used in the following ratio: 1 part stool to 3 parts fixative.





Procedure for the Use of TOTAL-FIX™ (Universal Fixative)

1. Specimen vial containing TOTAL-FIX™ and fecal specimen

Ratio of 1/3 stool, 2/3 fixative – MIX WELL.

Allow to fix 30 min before processing.

2. Tube or concentration device

Add approximately 1-2ml fixative/specimen mix to the tube or device. Mix well prior to pouring into the tube or device.

DO NOT ADD ANY RINSE FLUIDS: Saline, water, formalin.

Rinse fluids will prevent routine permanent staining.



10 min at 500 x g

- 4. Pour off most of excess fixative.
- 5. Mix sediment with remaining fixative.

6. Prepare slides for permanent stains; stain slides.

Allow slides to dry for ~30-45 min at 37 °C.

Slides can be placed on trays and put in the incubator.

Room temperature drying requires ~60 min.

7. Add rinse fluid to remaining stool sediment from step 5.

Mix sediment and rinse fluid well before centrifugation.

Proceed with routine concentration procedure.

Single rinse including ethyl acetate step is recommended.

DO NOT ADD ethyl acetate if the specimen contains a lot of mucus.

8. Ring debris layer and pour off excess fluid.

Mix and examine sediment as concentration sediment slide.

Entire 22 x 22mm coverslip: low power (10X objective)

1/3 - 1/2 coverslip: high dry power (40X objective)





Cat. no. 280705

Fecal Concentrating Systems



ParaCon™ Kit, Open System







ParaCon™ Filter Funnels Only

The ParaCon™ filter-funnel device provides a standard and consistent mesh size and allows filtration of fecal material without clogging, by Hardy Diagnostics.

96 funnels/box.....PK96



ParaCon™ II Kit, Closed System

A complete closed system for concentrating protozoan cysts, oocysts, spores, as well as helminth eggs and larvae. The system is designed to be used in direct connection with 30ml stool transport specimen vials (not included). Supplied with 120 filter cap/centrifuge tube assembly, 50ml, 120 centrifuge tube caps, and 2x15 Triton® X-100 reagent, by Hardy Diagnostics.

120 tests/kit.....PC120

A Culture of Service[™] Parasitology **7**

Centrifuge Tubes



15ml Centrifuge Tube

Centrifuge Tube

Blue screw cap, black printed graduations, white printed writing space, non-skirted, racked, sterile.



50ml Centrifuge Tube

Material:

Tube: Polypropylene (PP) Cap: High Density Polyethylene (HDPE) Spin rate: 8,500 RPM Temperature Range: -40°C to +80°C

Centrifuge Tube, Sterile Racked, 15ml, 50 tubes/rack, 500/case......6286 50ml, 25 tubes/rack, 500/case.....6289



15ml Centrifuge Tube, Sterile, Racked



50ml Centrifuge Tube, Sterile, Racked



50ml skirted, Centrifuge Tube, Self-Standing

Centrifuge Tube

Blue screw cap, black printed graduations, white printed writing space, non-skirted, bulk packed, non-sterile.

Material:

Tube: Polypropylene (PP)

Cap: High Density Polyethylene (HDPE)

Spin rate: 8,500 RPM

Temperature Range: -40°C to +80°C

| 15ml, | 500/case | 6284 |
|-------|----------|------|
| 50ml, | 500/case | 6287 |

Centrifuge Tube, Self-Standing

Tubes are RNase/DNase free, non-pyrogenic, and non-cytotoxic, with writing area. 50ml centrifuge tube, polypropylene with separate red screw cap (HDPE), skirted for self-standing, printed white graduation marks, non-sterile, bulk-packed.

Material:

Tube: Polypropylene (PP)

Cap: High Density Polyethylene (HDPE)

Temperature Range: -196°C to +121°C

Cap: -50°C to +100°C

Stains & Reagents



Acid Alcohol 0.5%

Acid alcohol decolorizer
32 oz. Each......AAD32

Acid Alcohol 90%

Carbol Xylene

| 16 | oz, | Each | VXZ016 |
|----|-----|------|--------|
| 32 | oz. | Each | VXZ032 |

Cryptosporidium Stain, Modified (Partial)Acid Fast, also for *Isospora* cold method.

Kinyoun Carbol Fuchsin with Methylene Blue counterstain.

4 x 8 oz bottles.......482K

Kinyoun Carbol Fuchsin with Malachite Green counterstain.

Ethanol 70%

For trichrome and other uses, reagent grade. 32 oz, Each..........VXB032 One gallon, Each.......3716A128

Envirene, Xylene Substitute

Ethyl Acetate

For preparing parasite concentrations.

16 oz, Each.....ET105

Ethanol 95%

Iodine Alcohol

For removing mercury deposits in Schaudinn or PVA fixed fecal smears. Iodine alcohol prevents mercury-caused artifacts on slides in Wheatley trichrome staining procedure.

| 16 oz, Each | VXI016 |
|------------------|--------|
| One gallon, Each | VXI128 |

Iodine, Dobell and O'Connor

A weak iodine solution (diluted Lugol's) is recommended for use in staining protozoan cysts. This preparation is a 1:5 dilution of Lugol's lodine.

Amber glass bottle, 15ml.....Z66

Mayer's Albumin





Schaudinn's Fixative, Modified

Mercury-free and used as an on-slide parasite fixative for fresh fecal smears. Modified Schaudinn's Fixative is used in Wheatly trichrome stain procedures and prevents distortion of parasitic elements (copper sulfate formula).

| 16 oz, | Each | VXM016 |
|--------|------|--------|
| 32 oz, | Each | VXM032 |

TOTAL-FIX™ Fixative,

(Schaudinn's Zinc Fixative)

Trichrome Starter Kit

Volu-Sol's Trichrome parasitology starter kit (Wheatley's Procedure) has everything you need to get going. This single, convenient package contains all the materials to prepare stained fecal smears.

The kit contains:

- 8 ounces each of Schaudinn's Fixative and Trichrome Stain
- 16 ounces each of Carbol Xylene, Xylene, lodine Alcohol, 70% Ethanol, 95% Ethanol, Acid Ethanol 90%
- 10 reusable Coplin Jars.

Additionally, Hardy sells a refill kit (#VXR010) with all of the above listed items except Coplin Jars.

Kit.....VXF019

Trichrome Stain, Modified

For staining microsporidia, formulated according to Weber, with aniline blue.

16 oz, EachMT016

Trichrome Starter Kit-Refill

8 reagents/kit, without jars VXR010

Xylene

Xylene, a component of the trichrome procedure for parasitology. A mixture of ortho, para, and meta dimethylbenzene. (For a non-toxic alternative, see "Envirene.")

| 16 oz, Each | | 134B16 |
|-------------|------|---------|
| One gallon, | Each | 134B128 |

Wheatley's Trichrome Stain

The Wheatley's trichrome stain is used in the differentiation and rapid staining of intestinal parasites. This kit may also be used as a counter-stain in histological sections when performing the Gomori procedure.

| 16 oz, | Each | Γ016 |
|--------|------|----------|
| 32 oz, | Each | Г032 |

Staining Accessories



Coplin Jar, Glass

For staining slides, the jar holds five single 3" x 1" slides vertically or 10 slides back-to-back. Screw cap is white, linerless polypropylene, which reduces solvent evaporation. Rectangular base. Holds approximately 60ml. Approximate inside dimensions: 26mm L x 26mm W x 90mm D. Each.......900570



Coplin Jar, Plastic

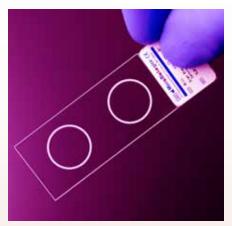
For manual staining procedures, jars are white plastic with a screw-on top to minimize evaporation. These jars are for use in all staining procedures, with slots on top to eliminate slide contact. Each jar holds 5 slides in upright position or 10 slides back-to-back. Each........................VCJ001



Slide Staining Rack

This stainless steel staining rack is designed for use with laboratory sinks of various sizes. Triangular slide supporting rods have a tapered top and contact the slides only in a narrow zone. Rack can be easily and quickly adjusted to fit sinks up to 53.4cm (21") inside dimensions.

Control Slides for Stains



Control Slide, Blood Parasite

This quality control slide provides an air-dried, methanol-fixed, blood parasite smear containing Plasmodium, Babesia, or Trypanosoma.

10 slides/box.....SL9010

Control Slide, Intestinal Protozoa, Zinc PVA

Each slide has a single air-dried, Zinc PVA preserved, fecal smear with a representative intestinal protozoa.

10 per box......SL1010

Control Slide,

Intestinal Protozoa, SAF

Each slide has a single air-dried, SAF preserved fecal smear with a representative intestinal protozoa.

10 slides/box.....SL1510

Control Slide, Cryptosporidium

This quality control slide provides a single airdried and methanol-fixed fecal smear containing acid-fast-positive *Cryptosporidium* and acid-fast-negative intestinal bacteria.

10 slides/box.....SL4510

Control Slide, Pneumocystis

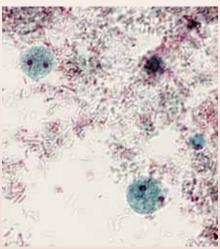
For QC of staining procedures, such as the giemsa or silver nitrate stains. This quality control slide provides a single air-dried and methanol-fixed smear tissue preparation containing *Pneumocystis*.

10 slides/box.....SL7010

Control Slide, Acid-Fast Control Slide

This quality control slide provides two air-dried and methanol-fixed droplets within two etched circles. The circle nearest the label contains a droplet of an acid-fast-positive Mycobacterium. The circle furthest from the label contains a droplet of an acid-fast-positive Cryptosporidium in a fecal smear sample and contains acid-fast-negative intestinal bacteria.

10 slides/box......SL4010



Dientamoeba fragilis

Parasite Suspensions for QC

Parasite suspensions are packaged in a vial containing 1ml of a particular parasite species. Each parasite suspension comes with a Certificate of Performance that includes detailed information about the parasite. Choose from these common organisms below:

| Parasitology | FPO1 | Giardia lamblia Parasite Suspension |
|--------------|------|--|
| | FPO2 | Cryptosporidium species Parasite Suspension |
| | FPO3 | Diphyllobothrium latum Parasite Suspension |
| | FPO4 | Taenia species Parasite Suspension |
| | FPO5 | Ascaris lumbricoides Parasite Suspension |
| | FP06 | Strongyloides stercoralis Parasite Suspension |
| | FP07 | Blastocystis hominis species Parasite Suspension |
| | FP12 | Endolimax nana Parasite Suspension |



Features

- Ready-to-use
- · Hassle-free packaging
- Room temperature storage
- Certificate of Performance
- Two-year shelf-life
- CF Marked medical IVD

Applications

- QC of diagnostics kits and methods
- Microscopic Examination
- Acid-Fast staining procedures
- Proficiency programs
- Education

Culture Media for Amoeba

Free-Living Amoeba Media

For the detection of Acanthamoeba and Naegleria species from clinical and environmental samples. Microscopic examination after two to three days reveals the presence of typical "feeding tracks" which are characteristic of Acanthamoeba sp. Requires E. coli stock culture (not provided) for use in preparing the bacterial lawn on the Non-Nutrient Agar plates.

Acanthamoeba Broth

For maintenance of stock cultures. 16x100mm tube, 5ml fill, 20/pk......K225 Page's Saline

Preparation of suspension used to inoculate Non-Nutrient Agar plates.
13x100mm polycarbonate tube,
2ml fill, 20/pk......R225

Non-Nutrient Agar

Non-Nutrient Agar plate for the detection of free-living amoebae including *Acanthamoeba* and *Naegleria* spp., by Hardy Diagnostics. 15x100mm plate,

10/pk.......G225



Acanthamoeba castellanii showing "feeding tracks" on Non-Nutrient Agar with $\it E.\ coli.$

11 Ways to Make a Better Slide

by Lynne S. Garcia, MS, MT, CLS, BLM, FAAM



The single most important step in the preparation of a well stained fecal smear is good fixation.

Slides should always be drained between solutions. Touch the end of the slide to a paper towel for two seconds to remove excess fluid before proceeding to the next step.

Incomplete removal of mercuric chloride (liquid Schaudinn's fixative with PVA) may cause smear to contain highly refractive crystals or granules, which may prevent detection or identification of any organisms present. The 70% ethanol-iodine solution removes the mercury from the slide; the subsequent alcohol rinses then remove the iodine (should be a strong tea color). Thus, when the slide is ready for trichrome staining, both the mercury and iodine have been removed.

When using non-mercury based fixatives, the iodine-alcohol step (used for the removal of mercury) and the subsequent alcohol rinses can be eliminated from the procedure. The smears for staining can be pre-rinsed with 70% alcohol and placed in the trichrome stain, or they can be placed directly into the trichrome stain as the first step in the staining protocol.

5 Smears that are predominantly green may be due to the inadequate removal of iodine by the 70% ethanol (steps 3 and 4). Lengthening the time of these steps or more frequent changing of the 70% ethanol will help.

To restore weakened trichrome stain, remove the cap and allow the ethanol (carried over on the staining rack from a previous dish) to evaporate. After a few hours, fresh stock stain may be added to restore lost volume. Older, more concentrated stain produces more intense colors and may require slightly longer destaining times (an extra dip). Remember that PVA smears usually require a slightly longer staining time.

Although the trichrome stain is used essentially as a "progressive" stain (no destaining is necessary), the best results are obtained by using the stain "regressively" (destaining the smears briefly in acidified alcohol). Good differentiation is obtained by destaining for a very short time (two dips only, approximately 2 to 3 seconds per dip); prolonged destaining results in poor differentiation.

It is essential to rinse the smears free of acid to prevent continued destaining. Since 90% alcohol will continue to leach trichrome stain from the smears, it is recommended that after the acid-alcohol is used, the slides be quickly rinsed in 100% alcohol and dehydrated through two additional changes of 100% alcohol.

In the final stages of dehydration (steps 9 to 11), the 100% ethanol and the xylene (or xylene substitute) should be kept as free from water as possible. Coplin jars must have tightfitting caps to prevent both evaporation of reagents and absorption of moisture. If the xvlene becomes cloudy after addition of slides from the 100% ethanol, return the slides to fresh 100% ethanol and replace the xylene with fresh stock.

If the smears peel or flake off, the specimen might have been inadequately dried on the slide (for PVA-fixed specimens), the smear may have been too thick, or the slide may have been greasy (fingerprints). However, slides generally do not have to be cleaned with alcohol prior to use.

If the stain appears unsatisfactory upon examination and it is not possible to obtain another slide to stain, the slide may be restained. Place the slide in xvlene to remove the coverslip and reverse the dehydration steps. Add 50% ethanol as the last step. Destain the slide in 10% acetic acid for several hours and wash it thoroughly first in water; and then in 50% and 70% ethanol. Place the slide in the trichrome stain for 8 minutes and complete the staining procedure.

References:

- 1. Clinical Laboratory
 Standards Institute.
 2005. Procedures
 For the Recovery and
 Identification of Parasites
 From the Intestinal Tract,
 Approved Guideline,
 M28-2A. Clinical
 Laboratory Standards
 Institute. Villanova, PA.
- 2. Garcia, L.S. (Coordinating Editor). 2003. Selection and Use of Laboratory Procedures for Diagnosis of Parasitic Infections of the Gastrointestinal Tract, Cumitech 30A. ASM Press. Washington, D.C.
- 3. Garcia, L.S. 2007.

 Diagnostic Medical

 Parasitology, 5th Edition.

 ASM Press. Washington,
 D.C.
- 4. Garcia, L.S. 2009. Practical Guide to Diagnostic Parasitology, 2nd Edition. ASM Press. Washington, D.C.



Microscope Supplies

Bibulous Blotting Paper

High quality, highly absorbent papers manufactured for minimum linting and shedding. Recommended for drying slides and small parts or components. Bibulous paper, slide blotting paper, non-linting, superabsorbent.



12 books, 50 sheets per book......28511007

Cover Glass

High quality, borosilicate cover glass is non-corrosive and non-fogging and is devoid of scratches, bubbles, and striations. The flatness provides a uniform distortion free surface. A desiccant is added to each box to ensure that moisture doesn't degrade the cover glass. Convenient plastic storage container allows for easy stacking on the shelf, by Hardy Diagnostics.

| 18x18mm, | 1 | oz | box | .1818HD |
|----------|---|----|-----|---------|
| 22x22mm, | 1 | oz | box | .2222HD |
| 22x40mm, | 1 | oz | box | .2240HD |
| 24x40mm, | 1 | oz | box | 2440HD |
| 24x50mm, | 1 | oz | box | .2450HD |

ProSlide™ Microscope Slides

Single frosted one end on one side. White glass, beveled edges. Available in the super clean and polished premium grade or economy grade. The economy slide is not recommended for hematology use, by Hardy Diagnostics.

| 3x1 inches x 1mm, 72/box: | |
|---------------------------|-------|
| frosted, economy | PF72E |
| frosted, premium | |
| plain, economy | |
| plain, premium | |

Lens Cleaner

An effective microscope lens cleaning solution in a dropper bottle. Safe to use on the most delicate optics. Use with lens tissue, Cat. no. 52846001, by Hardy Diagnostics.

Lens Paper, Non-linting

For cleaning microscope lenses, safety glasses, goggles, and more with no scratching. Dust-free lens paper tissues are ideal for use with liquid cleaners.

4x6 inches, 50 sheets/pk, 12/pks......52846001

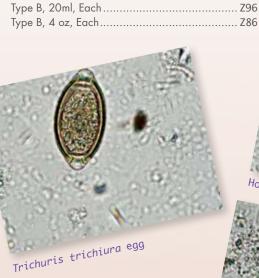
Immersion Oil

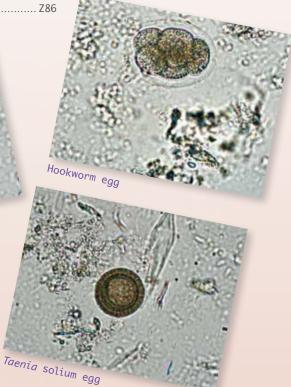
High Viscosity

Used to assist in microscopic examination at high power by increasing the resolving power, by Hardy Diagnostics.

| Low Viscosity | |
|--------------------|-----|
| Type A, 20ml, Each | Z95 |
| Type A, 4 oz, Each | Z85 |







Rapid Tests

PARA-TECT™ Cryptosporidium/ Giardia Direct Fluorescent Assay

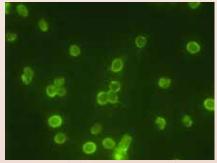
This direct fluorescent assay (DFA) is an in vitro immunoassay for the qualitative determination of Cryptosporidium and Giardia oocysts and cysts in feces. Can be used with stools preserved in 10% formalin, SAF, or TOTAL-FIX™ Universal Fixative, results in 60 minutes.

75 tests......MCCCG75

PARA-TECT™ Giardia lamblia Antigen Detection

This microwell ELISA test is an in vitro immunoassay for the qualitative determination of Giardia antigen in feces. It is a double antibody (sandwich) ELISA using an anti-giardia antibody to capture the antigen from the stool supernatant. A second anti-giardia antibody is then added, which sandwiches the captured antigen. This reaction is visualized by the addition of an anti-second antibody conjugated to peroxidase and the chromogen tetramethylbenzidine (TMB). The resulting blue color development indicates the presence of Giardia antigens being bound by the anti-giardia antibodies. Results in 45 minutes with a sensitivity of 5-10 ng/ml Giardia.

96 tests......MCCGA96



Cryptosporidium parvum. Obtained from the EPA Microbiology site. Image credit: EPA/H.D.A. Lindquist

Immuno Card STAT!®, Cryptosporidium/ Giardia

A rapid immunoassay for the qualitative detection of *Cryptosporidium parvum* and *Giardia lamblia* specific antigens in aqueous extracts of fecal specimens. It is intended for *in vitro* diagnostic use as an aid in the detection of suspected *Cryptosporidium* or *Giardia* infections.

30 tests.......750830



InPouch™ TV (*Trichomonas vaginalis* Test)

This unique transport and test system is suitable for hospital and outpatient clinics. It decreases labor time with two procedures combined into one test. An accurate system for the detection of Trichomonas vaginalis in both male and female. Pouch fits into a plastic frame that is laid on the microscope stage. Organisms can be viewed directly in the pouch under the microscope, without slide preparation. It contains a highly selective medium for T. vaginalis, which facilitates early detection of infection and detects fewer numbers of organisms than other competitive methods. Patient receives treatment more quickly. Less severe infections are readily detected. One year shelf life from date of manufacture, pouch for Trichomonas vaginalis, Plastic clips for microscope stage, 12/box.....142205 Live culture (positive control),

InPouch™ TF-Bovine, for *Tritrichomonas foetus*

Tritrichomonas foetus in cattle is a sexually transmitted infection associated with aborted calves, low birth weight, or delayed calving, which can result in decreased herd yields of 8-29%. Infected bulls are asymptomatic, long-term carriers; their infection rates are 6-8% but have been found as high as 44% in some rangeland areas of the western US. Bovine trichomoniasis is caused by the flagellate protozoan Tritrichomonas foetus.

- Used for the detection of non-specific trichomonads in bovines, *Trichomonas gallinae* in ayian, and *T. suis* in swine
- · Requires less hands-on time than wet mount
- Two procedures (culture and identification) combined into one test
- No expensive equipment required
- One year room temperature shelf life to reduces storage cost
- Testing made easy
- · Suitable for in-the-field testing
- No slide preparation required
- · Innovative packaging increases convenience

100 tests......111003

InPouch™ TF-Feline, for *Tritrichomonas* foetus

Tritrichomonas foetus in felines is a protozoan infection of the large intestine which can lead to prolonged and intractable diarrhea. Recent studies have shown that *T. foetus* infects approximately 31% of cats.

Frequently, cats are co-infected with Giardia, or, because T. foetus and Giardia appear similar, cats are misdiagnosed with Giardia. When a cat diagnosed with Giardia fails to respond to treatment, it is recommended that the cat be tested for T. foetus

InPouch™ TF-Feline is a culture and identification system that can detect infection by a single trichomonad. The specialized medium allows for maximum growth of trichomonads while inhibiting the growth of yeast, mold, and bacteria. One year shelf life from the date of manufacture.

- · Suitable for in-the-field testing
- · No slide preparation required
- · Reagents stored at room temperature
- · Innovative Packaging
- · Unique transport and test system
- Wet mount and culture in one system

Two procedures are combined into one test (culture and identification).



Mast Toxoreagent™, Rapid Latex Agglutination Test Kit

Merifluor®, Crypto/Giardia

Merifluor® is an in vitro direct immunofluorescent detection procedure for the simultaneous detection of Cryptosporidium oocysts and Giardia cysts in fecal material. Requires just 30 minutes to complete the test. Bright apple-green fluorescence of the parasite against red-orange background makes rare organisms easy to see.

50 tests......250050





For a complete listing of Microscope Supplies, please refer to our General Lab Supplies Catalog or scan.





