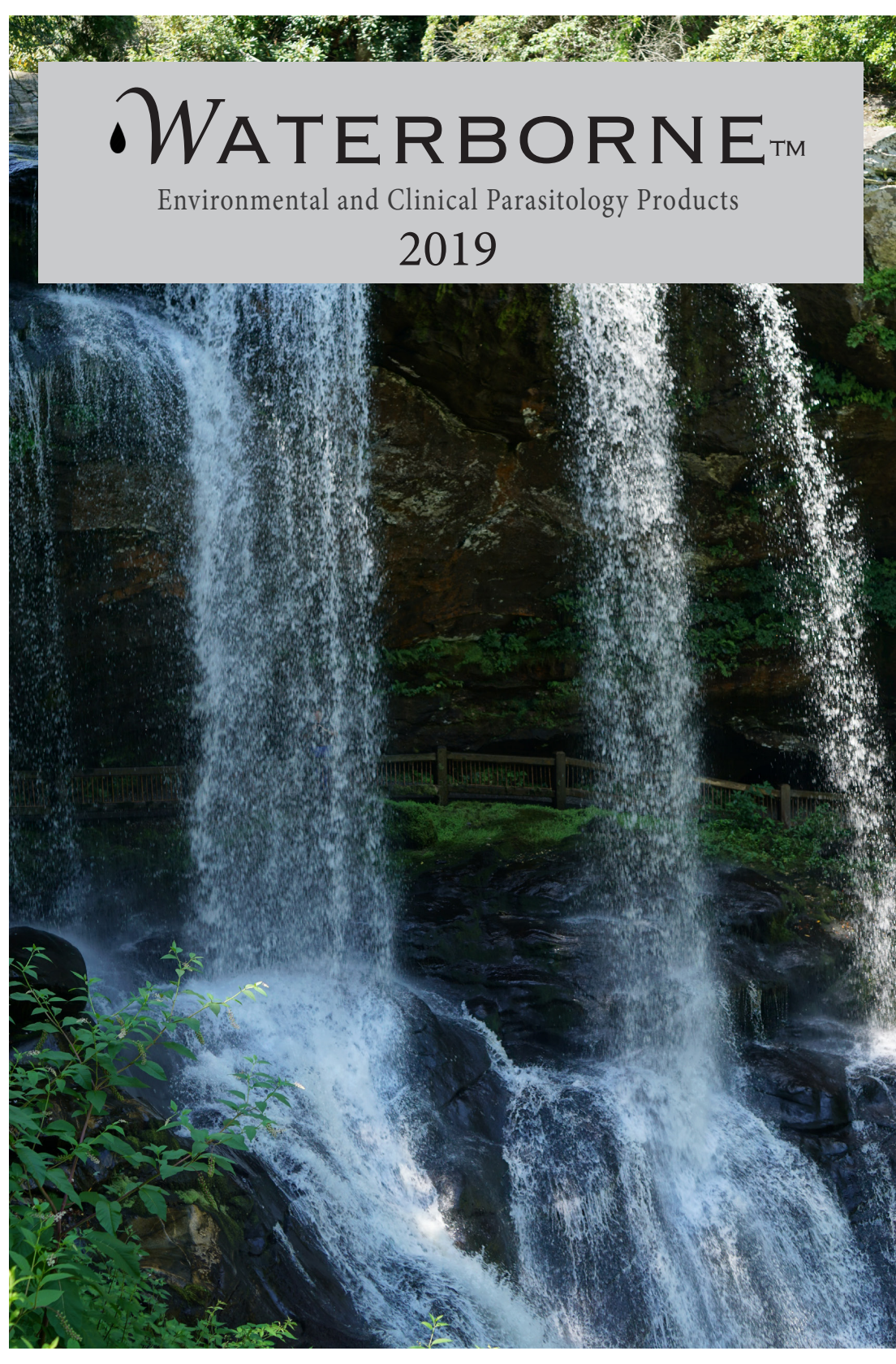


# WATERBORNE™

Environmental and Clinical Parasitology Products

2019





Cover photo: Cullasaja Falls on the Callusaja River, Macon  
County, North Carolina. Photo taken by Henry H. Stibbs.

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## OUR COMPANY MISSION

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The mission of Waterborne, Inc. is to provide products of the highest quality and at a reasonable price to the water-testing industry and to research laboratories, while supporting these products with rapid and personalized customer service and technical support.

## CONTACTING US

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Our hours of operation are M-F, 9:00 a.m. to 5:00 p.m. Central Time. Please contact us for orders, product information, pricing, or technical support.

E-mail:                      Orders: [orders@waterborneinc.com](mailto:orders@waterborneinc.com)  
                                    Technical Support: [support@waterborneinc.com](mailto:support@waterborneinc.com)  
                                    Billing: [accounts@waterborneinc.com](mailto:accounts@waterborneinc.com)  
                                    All Other Inquiries: [custserv@waterborneinc.com](mailto:custserv@waterborneinc.com)

Phone:                      Toll-Free Telephone & Fax: (866) 895-3338  
                                    Telephone & Fax: (504) 895-3338

Post:                        Lab Address: 924 Valmont St., Ste. 101A,  
                                    New Orleans, LA 70115  
                                    Office Address: 6045 Hurst St., New Orleans, LA 70118

## TECHNICAL SUPPORT

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Please contact us by telephone, fax, or email during our daily operational hours, M-F, 9:00 a.m. to 5:00 p.m. Central Time.

## CUSTOM ORDERS

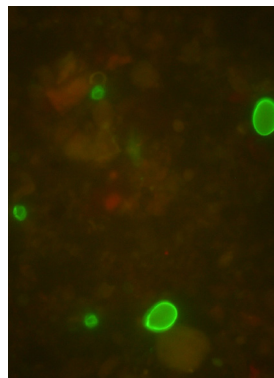
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We offer antibody reagents labeled with several of fluorochromes; however, we can create kits using any fluorochrome.

Parasite preparations can be customized for your specific needs. Please let us know if you need an item suspended in a special solution or volume or if you need a preparation freeze- or heat-killed, etc.



Waterborne™, Inc. is a worldwide leader in the field of environmental and clinical parasitology with an emphasis on *Giardia*, *Cryptosporidium* and microsporidia in addition to fluorescent antibody kits, which test environmental samples (primarily surface water) and aid in veterinary disease diagnosis.



Waterborne™, Inc. offers an extensive line of fluorescent antibody kits with a variety of fluorochromes for use in the detection of cysts and oocysts as well as spores of *Giardia* spp., *Cryptosporidium* spp., and microsporidian species (*Encephalitozoon intestinalis*, *E. cuniculi*, and *E. hellem*) that may be found in water, food, or various environmental samples. The antibody kits can also be used in veterinary clinical diagnosis.

Detection kits can be used in the following manner:

- immunofluorescence microscopy
- flow cytometry
- fluorescence-activated cell sorting
- laser scanning-based systems
- immunomagnetic separation (IMS methods)

Detection kits for water and food testing are available for the simultaneous detection of *Giardia* and *Cryptosporidium*, as they contain combined antibodies against each parasite. Individual antibody kits for the detection of single parasite stages, genera, or species are available as well.

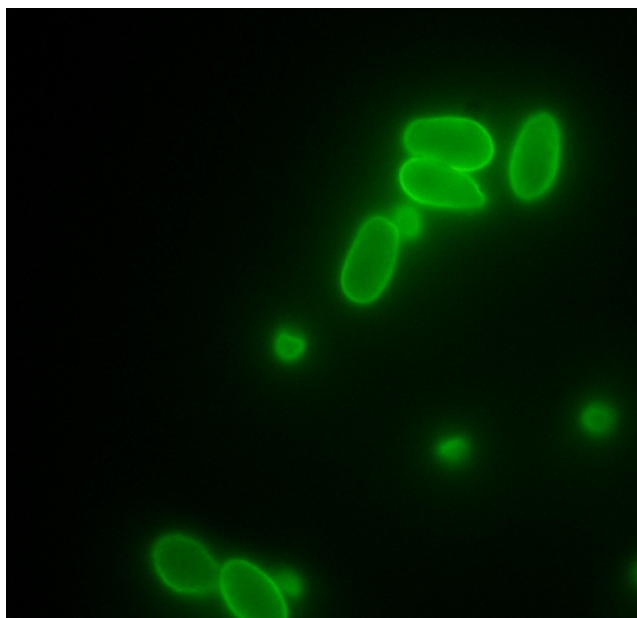
All kits are available as “Reagent-Only Kits” in two concentration formats: 1X and 20X. The *Giardia* and *Cryptosporidium* detection kits are also available as “Comprehensive Kits.”

## AVAILABLE FLUOROCHROMES

FLUOROCHROME	FLUOROCHROME CODE	FLUORESCENCE	MAXIMUM $\lambda$ (NM)	
			EXCITATION	EMISSION
Aminomethylcoumarin	AMCA	Blue	352	448
Alexa Fluor® 350	AF350	Blue	346	442
Fluorescein (FL-5-EX)	FL	Green	492	516
Alexa Fluor® 488	AF488	Green	495	519
Tetramethylrhodamine	TAMRA	Red-Orange	546	580
Cy3™	Cy3	Red-Orange	550	570
Alexa Fluor®555	AF555	Red-Orange	555	565
R-phycoerythrin	RPE	Red	480/546/565	578
Texas Red®	TR	Red	583	603
Cy5™	Cy5	Deep Red*	640	670
Alexa Fluor®647	AF647	Deep Red*	650	668

\*Not visible with use of filter set. *For use with flow cytometry only.*

\*\*If you do not see a specific fluorochrome that you would like, please let us know.



The figure to the left demonstrates the typical bright green fluorescein-antibody reaction with *Giardia lamblia* and *Cryptosporidium parvum*.

## APPROVALS / VALIDATION OF DETECTION KITS

AGENCY	METHODS	PRODUCT DESCRIPTION	ITEM NUMBERS
1. US EPA	1622	Aqua-Glo® G/C Direct	<ul style="list-style-type: none"> <li>• A100FLK</li> <li>• A100FLR-1X</li> <li>• A100FLR-20X</li> </ul>
		Crypt-a-Glo®	<ul style="list-style-type: none"> <li>• A400FLK</li> <li>• A400FLR-1X</li> <li>• A400FLR-20X</li> </ul>
		AccuSpike®-IR	<ul style="list-style-type: none"> <li>• PACIR3</li> <li>• PACIR6</li> <li>• PACIR12</li> </ul>
2. US EPA	1623	Aqua-Glo® G/C Direct	<ul style="list-style-type: none"> <li>• A100FLK</li> <li>• A100FLR-1X</li> <li>• A100FLR-20X</li> </ul>
		Giardi-a-Glo®	<ul style="list-style-type: none"> <li>• A300FLK</li> <li>• A300FLR-1X</li> <li>• A300FLR-20X</li> </ul>
		Crypt-a-Glo®	<ul style="list-style-type: none"> <li>• A400FLK</li> <li>• A400FLR-1X</li> <li>• A400FLR-20X</li> </ul>
		AccuSpike®-IR	<ul style="list-style-type: none"> <li>• PACIR3</li> <li>• PACIR6</li> <li>• PACIR12</li> </ul>
3. Russian Government	MYK 4.2.2314-08	Aqua-Glo® G/C Direct	<ul style="list-style-type: none"> <li>• A100FLK</li> </ul>
4. Russian Government	MYK 4.2.2959-11	Aqua-Glo® G/C Direct	<ul style="list-style-type: none"> <li>• A100FLK</li> </ul>
		G/C Combo-Grab™	<ul style="list-style-type: none"> <li>• IMS100-20</li> </ul>
		Giardia-Grab™	<ul style="list-style-type: none"> <li>• IMS300-20</li> </ul>
		Crypto-Grab™	<ul style="list-style-type: none"> <li>• IMS400-20</li> </ul>
5. US EPA	1623.1	Aqua-Glo® G/C Direct	<ul style="list-style-type: none"> <li>• A100FLK</li> <li>• A100FLR-1X</li> <li>• A100FLR-20X</li> </ul>
		Giardi-a-Glo®	<ul style="list-style-type: none"> <li>• A300FLK</li> <li>• A300FLR-1X</li> <li>• A300FLR-20X</li> </ul>
		Crypt-a-Glo®	<ul style="list-style-type: none"> <li>• A400FLK</li> <li>• A400FLR-1X</li> <li>• A400FLR-20X</li> </ul>
		AccuSpike®-IR	<ul style="list-style-type: none"> <li>• PACIR3</li> <li>• PACIR6</li> <li>• PACIR12</li> </ul>



## ABOUT WATERBORNE™ ANTIBODY REAGENTS

The monoclonal antibodies used in Waterborne™ kits come from hybridoma cell lines that have been created by Waterborne™, Inc. (except for the anti-microsporidia antibody reagents, which are licensed to Waterborne™, Inc. by an academic institution). The polyclonal antibodies are also produced at Waterborne™. We continue to purify the antibodies from ascites or serum, conjugate the antibodies to fluorochromes, and quality-test all conjugated antibodies at the Waterborne™ laboratory. This allows us to control all aspects of the production process, which in turn ensures a high standard of quality control and consistency of products provided to our many customers around the world.

### AFFINITY

Our antibodies have a high affinity and will not leach off cells for several days, weeks, or months if stored in a cool, dark place and used in conjunction with our No-Fade™ Mounting Medium or Elvanol No-Fade™ Mounting Medium. Storage of prepared slides allows repeated viewing of slides and the opportunity to compare results from samples over an extended period of time. In addition to extended viewing in one lab, slides can be shipped for comparison between collaborating laboratories.

### INTENSITY

The intensity of the reaction is strong, leaving little room for incorrect identification and/or false positive reporting. For more complex sample matrices or fecal smears, we recommend using BlockOut™ Counterstain. BlockOut™ enhances the apparent intensity of reacting organisms by producing a strong red background against which the green specific reaction stands out. (BlockOut™ will fluoresce red when viewed under a fluorescein filter set. It is ideal for use with fluorescein-labeled antibodies).

### SPECIFICITY

The anti-*Giardia* monoclonal antibody is genus-specific and binds strongly and specifically with cysts of all species of *Giardia*. It is reactive with both live and formalinized cysts. The anti-*Cryptosporidium* monoclonal antibody is also genus-specific and binds strongly to oocysts of all species of *Cryptosporidium*. (There is, however, occasional cross-reactivity between this antibody and certain species of algae. In general, most investigators have reported that they can easily distinguish between the algae and *Cryptosporidium* oocysts.) All Aqua-Glo®, Giardi-a-Glo®, and Crypt-a-Glo® products were created with these two antibodies to ensure strong, specific reactions. The IMS Grab™-beads are also produced using the above antibodies.

# PRODUCT LINES

## ENVIRONMENTAL TESTING KITS

Waterborne™, Inc. offers an extensive line of fluorescent antibody kits with a variety of fluorochromes for use in the detection of cysts, oocysts, and spores of *Giardia* spp., *Cryptosporidium* spp., and microsporidian species (*Encephalitozoon intestinalis*, *E. cuniculi*, *E. hellem*, and *Enterocytozoon bienusi*) in water, food, and various environmental samples. Detection kits are available for the simultaneous detection of *Giardia* and *Cryptosporidium*, containing combined antibodies against each parasite or as individual antibody kits for the detection of single parasite stages, genera, or species.

## CLINICAL (VETERINARY) TESTING KITS



Our clinical diagnosis (veterinary purposes only) kits are available labeled with fluorescein only. These kits are designed for use in direct immunofluorescence with stool specimen smears prepared on microscope slides.

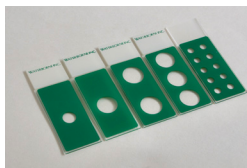
## QUALITY CONTROL SUSPENSIONS

Quality Control Standards (AccuSpike®-IR) of *Giardia lamblia* and *Cryptosporidium parvum* are flow cytometrically enumerated preparations available with gamma-irradiated organisms in a solution of deionized water with 0.01% Tween 20.



## LABORATORY SUPPLIES

Waterborne's line of laboratory supplies for immunofluorescence testing includes buffers, counterstain, mounting media, chemically treated multi-well slides, and DAPI.



## IMMUNOMAGNETIC SEPARATION (IMS)

IMS (immunomagnetic separation) particles are now available for use in the capture and isolation of *Giardia* spp. cysts and *Cryptosporidium* spp. oocysts. The beads are provided as a monodisperse, stable suspension of super-paramagnetic particles that measure approximately 1.4-1.6  $\mu\text{m}$  in diameter.



## PARASITES

Waterborne™ products include highly purified bulk and also flow-cytometrically counted parasite preparations. The stock of waterborne pathogens includes cysts, oocysts, and spores of *Giardia lamblia*, *Cryptosporidium parvum*, *Encephalitozoon intestinalis* (also *E. cuniculi* and *E. hellem*), *Cryptosporidium muris*, and *Giardia muris*. Organisms are prepared in a phosphate-buffered saline with antibiotics and 0.01% Tween 20 or in 5% formalin with 0.01% Tween 20. If requested, we can prepare parasites in an alternative solution.

# ENVIRONMENTAL KITS FOR WATER TESTING

Most of our kits are available in several formats depending on how many tests you would like to perform and what additional components may be needed. These formats go by the designations indicated in the chart below: K, R-1X, or R-20X.



COMPREHENSIVE KITS	REAGENT-ONLY KITS
K	R-1X
<ul style="list-style-type: none"> <li>1X fluorescent antibody reagent, 3.5 mL</li> <li>Positive Control*, 1.0 mL</li> <li>No-Fade™ Mounting Medium, 3.5 mL</li> <li>Block-Out™ Counterstain, 3.5 mL</li> <li>1X SureRinse™ wash buffer, 50 mL</li> <li>SuperStick™ Slides, 2-well, 1 box, 40 slides</li> <li>5000X DAPI, 0.4 mL</li> <li>75+ assays</li> </ul>	R-20X
	<ul style="list-style-type: none"> <li>1X fluorescent antibody reagent, 3.5 mL</li> <li>Positive control*, 1.0 mL</li> <li>75+ assays</li> <li>20X concentrated antibody reagent, 20 mL</li> <li>Positive control*, 1.0 mL</li> <li>Dilution/Blocking Buffer, 20 mL</li> <li>No-Fade™ Mounting Medium, 3.5 mL</li> <li>400+ assays</li> </ul>



\*The G/C Positive Control (PC101) included in the A100, A300, A400, and A800 kits consists of ~2x10<sup>5</sup> cysts of *Giardia lamblia* and ~2x10<sup>5</sup> oocysts of *Cryptosporidium parvum* in 1 mL buffered formaldehyde solution.

The number of organisms in the positive control is not exact and should not be used for sample recovery determination.

## IFA DETECTION KITS FOR WATER TESTING

PRODUCT	DESCRIPTION
A100 Aqua-Glo® G/C Direct	Direct, simultaneous detection of <i>Giardia</i> cysts & <i>Cryptosporidium</i> oocysts.
A300 Giardi-a-Glo®	Direct detection of <i>Giardia</i> cysts.
A400 Crypt-a-Glo®	Direct detection of <i>Cryptosporidium</i> oocysts.
A500 Mur-a-Glo™	Direct detection of <i>Giardia muris</i> <u>only</u> (species-specific)
A600 Sporo-Glo™	Direct detection of <i>Cryptosporidium</i> sporozoites and other intracellular life cycle stages.
A700 Microspor-FA™	Direct detection of Microsporidial spores ( <i>E. intestinalis</i> , <i>E. hellem</i> , <i>E. cuniculi</i> )
A710 MicrosporUltra-FA™	Direct detection of microsporidial spores ( <i>E. intestinalis</i> , <i>E. hellem</i> , <i>E. cuniculi</i> , <i>E. bienusi</i> )
A720 Bienusi-Glo™	Direct detection of Microsporidial spores ( <i>E. bienusi</i> <u>only</u> ).
A800 Lambli-a-Glo™	Direct detection of <i>Giardia lamblia</i> cysts <u>only</u> (species-specific)
A900 Troph-o-Glo™	Direct detection of <i>Giardia lamblia</i> trophozoites

NOT SURE WHICH KIT IS RIGHT FOR YOU?  
CONTACT US, WE'LL HELP YOU DECIDE.



COMBINED ANTIBODY KITS

OUR MOST POPULAR KITS

AQUA-GLO® SERIES



DIRECT, SIMULTANEOUS IFA DETECTION  
KITS, SINGLE FLUOROCHROME

A100FL. AQUA-GLO®

Direct, fluorescein-labeled, double monoclonal antibody solution for simultaneously detecting *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts by direct immunofluorescence. Applicable to IMS and flow cytometric methods, among others. All components included in kits are listed on page 10. US EPA validated for use in Methods 1623 & 1623.1

PRODUCT NUMBER	PRODUCT DESCRIPTION
A100FLK	Aqua-Glo®, G/C Direct, FL, Comprehensive Kit
A100FLR-1X	Aqua-Glo®, G/C Direct, FL 1X conc., Reagent Only
A100FLR-20X	Aqua-Glo®, G/C Direct, FL 20X conc., Reagent Only

A100FLACK. AQUA-GLO®

A100FLK plus AccuSpike®-IR PACIR12 in one kit. The A100FLACK is the A100FLK Kit described above and on page 10 plus 12 vials of flow-counted quality control standards (AccuSpike®-IR). For more information on AccuSpike®-IR, please see page 23. Additional items, such as slides or buffers, may be purchased separately. US EPA validated for use in Methods 1623 & 1623.1

PRODUCT NUMBER	PRODUCT DESCRIPTION
A100FLACK	Aqua-Glo®, G/C Direct, FL, Comprehensive Kit with AccuSpike®-IR



## A100CY3. AQUA-GLO®

Antibodies same as page 12. Direct, Cy3 dye-labeled dual monoclonal antibody solution for the detection of *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts by direct immunofluorescence.

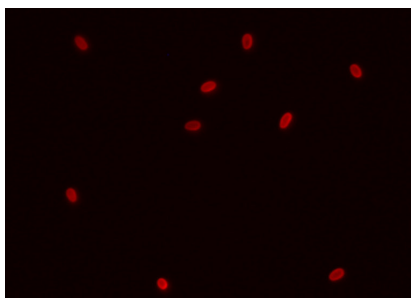
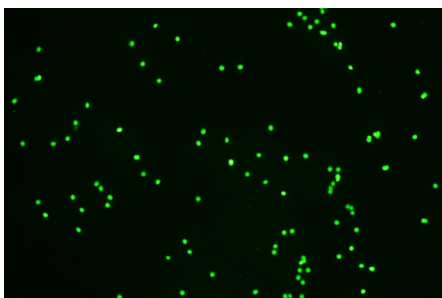
PRODUCT NUMBER	PRODUCT DESCRIPTION
A100Cy3K	Aqua-Glo® G/C Direct, Cy3, Comprehensive Kit
A100Cy3R-1X	Aqua-Glo® G/C Direct Cy3, 1X conc., Reagent Only
A100Cy3R-20X	Aqua-Glo® G/C Direct, Cy3, 20X conc., Reagent Only

## DIRECT, SIMULTANEOUS IFA DETECTION KITS, MULTI-FLUOROCHROME A100DF. AQUA-GLO®

An antibody solution consisting of a monoclonal antibody to *Giardia* and a monoclonal antibody made against *Cryptosporidium*, each labeled with a different fluorochrome. The monoclonal antibody to *Giardia* is labeled with Cy3\*, while the antibody to *Cryptosporidium* is labeled with fluorescein. The contrasting direct fluorochromes allow quick differentiation between *Giardia* cysts and *Cryptosporidium* oocysts. This kit requires a fluorescein filter set and a rhodamine filter set.

\*Other fluorochromes can be substituted for Cy3.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A100DFK	Aqua-Glo® G/C Direct, Dual Fluorochrome, Comprehensive Kit
A100DFR-1X	Aqua-Glo® G/C Direct, Dual Fluorochrome 1X conc., Reagent Only
A100DFR-20X	Aqua-Glo® G/C Direct, Dual Fluorochrome, 20X conc., Reagent Only



## INDIVIDUAL ANTIBODY KITS

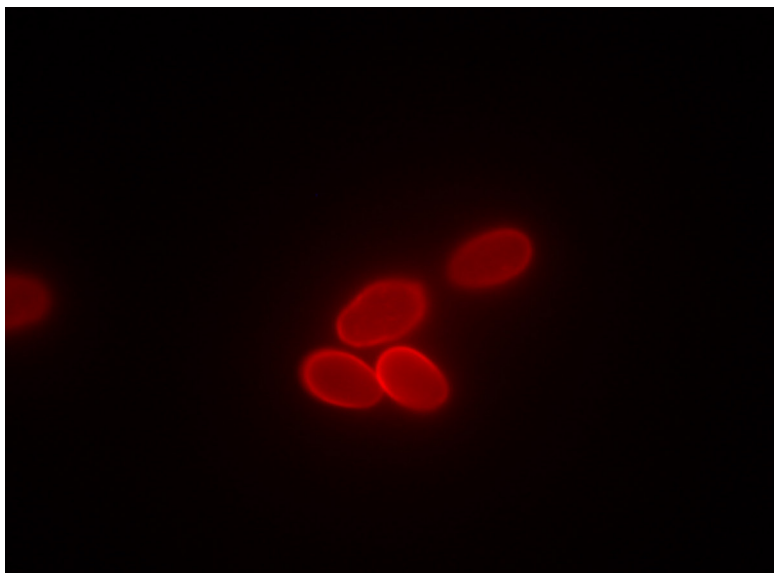
Individual antibody reagent kits for the detection  
of a single microorganism group.

### ANTI-*GIARDIA* CYSTS

#### A300. GIARDI-A-GLO®

This monoclonal antibody binds strongly and very specifically to cysts of all *Giardia* species tested to date. It is reactive with live and formalinized cysts and ready to use in all methods, including IMS methodology and flow cytometry. See page 5 for all available fluorochromes. US EPA validated for use in Method 1623.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A300FLK	Giardi-a-Glo®, FL, Comprehensive Kit
A300FLR-1X	Giardi-a-Glo® FL, 1x conc., Reagent Only
A300Cy3R-1X	Giardi-a-Glo®, Cy3, 1x conc., Reagent Only
A300BIOT-R-1X	Giardi-a-Glo®, BIOT, 1x conc., Reagent Only
A300FLR-20X	Giardi-a-Glo®, FL, 20x conc., Reagent Only
A300Cy3R-20X	Giardi-a-Glo®, Cy3, 20x conc., Reagent Only
A300BIOT-R-20X	Giardi-a-Glo®, BIOT, 20x conc., Reagent Only



## ANTI-CRYPTOSPORIDIUM OOCYSTS



**A400. CRYPT-A-GLO®**

The Crypt-a-Glo® reagent contains a monoclonal antibody that shows strong reactivity with oocysts of *Cryptosporidium* species. It is reactive with live and formalinized oocysts and it is ready for use in all methods, including IMS methodology and flow cytometry. For available fluorochromes, please see the chart on page 5. US EPA validated for use in Methods 1622 & 1623.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A400FLK	Crypt-a-Glo®, FL, Comprehensive Kit
A400FLR-1X	Crypt-a-Glo® FL, 1x conc., Reagent Only
A400Cy3R-1X	Crypt-a-Glo®, Cy3, 1x conc., Reagent Only
A400BIOT-R-1X	Crypt-a-Glo®, BIOT, 1x conc., Reagent Only
A400FLR-20X	Crypt-a-Glo®, FL, 20x conc., Reagent Only
A400Cy3R-20X	Crypt-a-Glo®, Cy3, 20x conc., Reagent Only
A400BIOT-R-20X	Crypt-a-Glo®, BIOT, 20x conc., Reagent Only



## ANTI-GIARDIA MURIS CYSTS

### A500. MUR-A-GLO™

This kit includes an IgG<sub>1</sub> monoclonal antibody that is species-specific and reactive only with cysts of *Giardia muris*. This antibody will not bind to cysts of *Giardia lamblia*. It binds best to non-formalinized cysts, but reacts well with cysts that have been stored in 2% (or less) formalin or 0.8% (or less) paraformaldehyde. Shows cross-reactivity with cysts of *Spironucleus muris*--a close relative of *G. muris*.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A500FLR-1X	Mur-a-Glo™ FL, 1x conc., Reagent Only
A500Cy3R-1X	Mur-a-Glo™, Cy3, 1x conc., Reagent Only

Mur-a-Glo™ positive control consists of ~2x10<sup>5</sup> cysts of *Giardia muris* in 1 mL of a buffered formaldehyde solution.

## ANTI-C. PARVUM SPOROZOITES (& OTHER INTRACELLULAR LIFECYCLE STAGES)

### A600. SPORO-GLO™

This reagent consists of a polyclonal IgG antibody made to sporozoites of *Cryptosporidium parvum*. It is essential for use in the Focus Detection Method\* (FDM) for evaluating viability of oocysts. This involves using cell culture in sterile well-slides with mammalian cell monolayers. Sporo-Glo™ is strongly reactive with all in vitro intracellular reproductive stages of *Cryptosporidium parvum*.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A600FLR-1X	Sporo-Glo™ FL, 1x conc., Reagent Only
A600Cy3R-1X	Sporo-Glo™, Cy3, 1x conc., Reagent Only
A600BIOT-R-1X	Sporo-Glo™, BIOT, 1x conc., Reagents Only
A600FLR-20X	Sporo-Glo™, FL, 20x conc., Reagent Only
A600Cy3R-20X	Sporo-Glo™, Cy3, 20x conc., Reagent Only
A600BIOT-R-20X	Sporo-Glo™, BIOT, 20x conc., Reagents Only

\*Information on the Focus Detection Method (FDM) is available upon request.

\*Sporo-Glo™ does not include positive control. We recommend that a fresh preparation produced by the investigator be used as a positive control.

## ANTI-MICROSPORIDIAL (*ENCEPHALITOZOON*) SPECIES

### A700. MICROSPOR-FA™

The antibody reagent in Microspor-FA™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Encephalitozoon* (= *Septata*) *intestinalis* by direct immunofluorescence. It is also strongly reactive with *E. cuniculi* and *E. hellem*. It is not reactive with *E. bienusi*.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A700FLR-1X	Microspor-FA™ FL, 1x conc., Reagent Only
A700Cy3R-1X	Microspor-FA™, Cy3, 1x conc., Reagent Only
A700FLR-20X	Microspor-FA™, FL, 20x conc., Reagent Only
A700Cy3R-20X	Microspor-FA™, Cy3, 20x conc., Reagent Only

\*Microspor-FA™ positive control consists of ~2x10<sup>5</sup> spores of *Encephalitozoon intestinalis* in 1 mL of a buffered formaldehyde solution.



## ANTI-MICROSPORIDIAL (*ENCEPHALITOZOON* & *ENTEROCYTOZOON*) SPECIES

### A710. MICROSPORULTRA-FA™

The antibody reagent in MicrosporUltra-FA™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Encephalitozoon* (= *Septata*) *intestinalis* and *Enterocytozoon bienusi* by direct immunofluorescence. It is also strongly reactive with *E. cuniculi* and *E. hellem*.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A710FLR-1X	MicrosporUltra-FA™, FL, 1x conc., Reagent Only
A710Cy3R-1X	MicrosporUltra-FA™, Cy3, 1x conc., Reagent Only
A710FLR-20X	MicrosporUltra-FA™, FL, 20x conc., Reagent Only
A710Cy3R-20X	MicrosporUltra-FA™, Cy3, 20x conc., Reagent Only

\*MicrosporUltra-FA™ positive control consists of two vials, the first including ~2x10<sup>5</sup> spores of *Encephalitozoon intestinalis* in 1 mL of a buffered formaldehyde solution and the second including 1 mL of *Enterocytozoon bienusi* positive fecal material in a buffered formaldehyde solution.

## ANTI-MICROSPORIDIAL (*ENTEROCYTOZON*) SPECIES

### A720 BIENUSI-GLO™

The antibody reagent in Bienusi-Glo™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Enterocytozoon bienusi* by direct immunofluorescence. \*Bienusi-Glo™ positive control consists of 1 mL of *Enterocytozoon bienusi* positive fecal material in a buffered formaldehyde solution.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A720FLR-1X	Bienusi-Glo™ FL, 1x conc., Reagent Only
A720Cy3R-1X	Bienusi-Glo™, Cy3, 1x conc., Reagent Only
A720FLR-20X	Bienusi-Glo™, FL, 20x conc., Reagent Only
A720Cy3R-20X	Bienusi-Glo™, Cy3, 20x conc., Reagent Only

## ANTI-*GIARDIA LAMBLIA* CYSTS

### A800. LAMBLI-A-GLO™

This IgG<sub>1</sub> monoclonal antibody is species-specific and reactive only with cysts of *Giardia lamblia*. Reactions can occur with live or formalinized cysts, and our antibody is ready to use in all methods, including IMS.

Note: Some beaver-derived isolates have proven non-reactive.

PRODUCT NUMBER	PRODUCT DESCRIPTION
A800FLR-1X	Lambli-a-Glo™ FL, 1x conc., Reagent Only
A800Cy3R-1X	Lambli-a-Glo™, Cy3, 1x conc., Reagent Only

## ANTI-*GIARDIA LAMBLIA* TROPHOZOITES

### A900. TROPH-O-GLO™

The reagent in this kit contains in IgG polyclonal antibody made against *Giardia lamblia* trophozoites. This product is ideal for immunofluorescence detection of trophozoites. Troph-o-Glo™ can also be used in conjunction with the clinical kits ST101 and ST102 for detection of trophozoites and cysts in stool specimens. Troph-o-Glo™ does not include positive control. We recommend that a fresh preparation produced by the investigator be used as positive control.

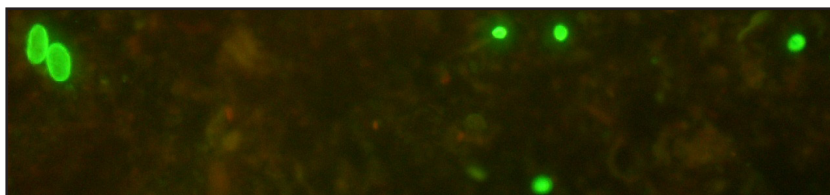
PRODUCT NUMBER	PRODUCT DESCRIPTION
A900FLR-1X	Troph-o-Glo™ FL, 1x conc., Reagent Only
A900Cy3R-1X	Troph-o-Glo™, Cy3, 1x conc., Reagent Only



## CLINICAL KITS FOR DIAGNOSTIC PURPOSES

For veterinary research purposes only. Kits come in two formats: K (Comprehensive Kit) and R (Reagent-Only).

<u>K</u> (COMPREHENSIVE KITS) INCLUDE:	R-1X (REAGENT-ONLY KITS) INCLUDE:
<ul style="list-style-type: none"> <li>• 1X fluorescent antibody reagent, 3.5 mL</li> <li>• Positive Control*, 1.0 mL</li> <li>• No-Fade™ Mounting Medium, 3.5 mL</li> <li>• Block-Out™ Counterstain, 3.5 mL</li> <li>• 1X SureRinse™ wash buffer, 50 mL</li> <li>• SuperStick™ Slides, 2-well, 1 box, 40 slides</li> <li>• 5000x DAPI, 0.4 mL</li> <li>• 75+ assays</li> </ul>	<ul style="list-style-type: none"> <li>• 1X fluorescent antibody reagent, 3.5 mL</li> <li>• Positive control*, 1.0 mL</li> <li>• 75+ assays</li> </ul> <p>*Cyst-a-Glo™, Giardi-a-Glo®, and Crypt-a-Glo® positive control consists of ~2x10/5 cysts of <i>Giardia lamblia</i> and ~2x10/5 oocysts of <i>Cryptosporidium parvum</i> in 1 mL stool, preserved with buffered formaldehyde solution.</p>



PRODUCT	DESCRIPTION
ST101 Cyst-a-Glo™	Direct, simultaneous detection of <i>Giardia</i> cysts & <i>Cryptosporidium</i> oocysts.
ST102 Giardi-a-Glo®	Direct detection of <i>Giardia</i> cysts.
ST103 Crypt-a-Glo®	Direct detection of <i>Cryptosporidium</i> oocysts.
ST112 Troph-o-Glo™	Direct detection of <i>Giardia lamblia</i> trophozoites.
ST104 Microspor-FA™	Direct, simultaneous detection of spores of <i>E. intestinalis</i> , <i>E. cuniculi</i> , and <i>E. hellem</i> .
ST114 MicrosporUltra-FA™	Direct, simultaneous detection of spores of <i>E. intestinalis</i> , <i>E. cuniculi</i> , <i>E. hellem</i> , and <i>E. bienusi</i> .
ST124 Bienusi-Glo™	Direct, simultaneous detection of spores of <i>E. bienusi</i> .

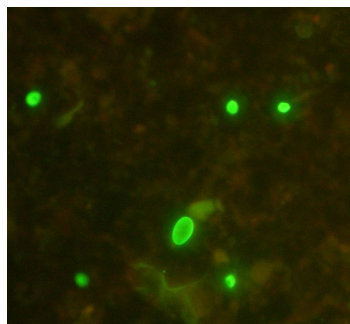
## DETECTION KITS FOR DIAGNOSTIC PURPOSES

### ANTI-GIARDIA CYSTS & CRYPTOSPORIDIUM OOCYSTS

#### ST101. CYST-A-GLO™

Flourescein-labeled dual monoclonal antibody reagent for rapid, simultaneous detection of *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts in fecal smears by direct immunofluorescence.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST101K	Cyst-a-Glo™, FL, Comprehensive Kit for Fecal Specimen
ST101R	Cyst-a-Glo™, FL, 1x conc., Reagent Only for Fecal Specimen



### ANTI-GIARDIA CYSTS

#### ST102. GIARDI-A-GLO®

Flourescein-labeled anti-*Giardia lamblia* cyst monoclonal antibody kit for rapid, direct immunofluorescence detection of *Giardia* cysts in fecal smears.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST102K	Giardi-a-Glo®, FL, Comprehensive Kit for Fecal Specimen
ST102R	Giardi-a-Glo®, FL, 1X conc., Reagent Only for Fecal Specimen

## ANTI-G. LAMBLIA TROPHOZOITES

### ST112. TROPH-O-GLO™

The reagent in this kit contains in IgG polyclonal antibody made against *Giardia lamblia* trophozoites. This product is ideal for detection of trophozoites in fecal smears by direct immunofluorescence. Troph-o-Glo™ does not include positive control. We recommend that a fresh preparation produced by the investigator be used as positive control.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST112R	Troph-o-Glo™, FL, 1x conc., Reagent Only

## ANTI-CRYPTOSPORIDIUM OOCYSTS

### ST103. CRYPT-A-GLO®

Flourescein-labeled anti-*Cryptosporidium parvum* oocyst monoclonal antibody kit for rapid, direct immunofluorescence detection of *Cryptosporidium* oocysts in fecal smears.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST103K	Crypt-a-Glo®, FL, Comprehensive Kit for Fecal Specimen
ST103R	Crypt-a-Glo®, FL, 1X conc., Reagent Only for Fecal Specimen

## ANTI-MICROSPORIDIAL SPECIES

### ST104. MICROSPOR-FA™

The antibody reagent in Microspor-FA™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Encephalitozoon* (=Septata) *intestinalis* by direct immunofluorescence. It is also strongly reactive with *E. cuniculi* and *E. hellem*. It is not reactive with *E. bienusi*. \*Microspor-FA™ positive control consists of ~2x10<sup>5</sup> spores of *Encephalitozoon intestinalis* in 1 mL of a buffered formaldehyde solution.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST104R	Microspor-FA™, FL, 1X conc., Reagent Only

## ST114. MICROSPORULTRA-FA™

The antibody reagent in MicrosporUltra-FA™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Encephalitozoon* (=Septata) *intestinalis* and *Enterocytozoon bienusi* by direct immunofluorescence. It is also strongly reactive with *E. cuniculi* and *E. hellem*. \*MicrosporUltra-FA™ positive control consists of 2 vials, the first including ~2x10<sup>5</sup> spores of *Encephalitozoon intestinalis* in 1 mL of a buffered formaldehyde solution and the second including 1 mL of *Enterocytozoon bienusi* positive fecal material in a buffered formaldehyde solution.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST114K	MicrosporUltra-FA™, FL, Comprehensive Kit for Fecal Specimen
ST114R	MicrosporUltra-FA™, FL, 1x conc., Reagent Only for Fecal Specimen

## ST124. BIENUSI-GLO™

The antibody reagent in Bienusi-Glo™ contains a monoclonal IgG antibody for the detection of microsporidial spores of *Enterocytozoon bienusi* by direct immunofluorescence in fecal smears. \*Bienusi-Glo™ positive control consists of 1 mL of *Enterocytozoon bienusi* positive fecal material in a buffered formaldehyde solution.

PRODUCT NUMBER	PRODUCT DESCRIPTION
ST124R	Bienusi-Glo™, FL, Comprehensive Kit for Fecal Specimen

## QUALITY CONTROL SUSPENSIONS

### G/C QUALITY CONTROL IN FIXATIVE

#### GIARDIA/CRYPTOSPORIDIUM POSITIVE CONTROL

Positive Control is a mixture of *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts in a mixed aldehyde buffer. The concentration of this suspension is approximately  $2 \times 10^5$  cysts and oocysts (each) per mL. These numbers are not exact and should not be used for sample recovery estimation.

PRODUCT NUMBER	PRODUCT DESCRIPTION
PC101	G/C Positive Control
PCST101	G/C Positive Control in Stool
NCST101	Negative Stool Control

### G/C QUALITY CONTROL STANDARD

#### ACCUSPIKE®-IR: FLOW CYTOMETRICALLY COUNTED

AccuSpike®-IR is a quality control standard for *Giardia* and *Cryptosporidium* testing. It is designed for use as the control spiking suspension in Methods 1622, 1623, and 1623.1 for the determination of percent recovery in Initial Precision and Recovery (IPR), Ongoing Precision and Recovery (OPR), and Matrix Spike (MS) tests.

Each AccuSpike®-IR 2.0 mL polypropylene microtube contains flow cytometrically sorted *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts, 100 each, suspended in 0.75 mL reagent-grade water with 0.01% Tween 20, that have been inactivated and preserved by gamma irradiation. The internal structures of the cysts and oocysts are completely intact and easily identified, and the cells are fully reactive with antibody-coated immunomagnetic particles and fluorescent antibodies. AccuSpike®-IR has a shelf life of 12 weeks from the date of production.

This is a non-hazardous, non-infectious product. Although the organisms exhibit signs of viability (e.g. propidium iodide exclusion, excystability), they have been proven to be non-infectious for animal models and in vitro assays (FDM).

\*Custom flow-counted spikes are also available. Please inquire about prices.

PRODUCT NUMBER	PRODUCT DESCRIPTION
PACIR3	AccuSpike®-IR - 3 vials
PACIR6	AccuSpike®-IR - 6 vials
PACIR12	AccuSpike®-IR - 12 vials

## LABORATORY SUPPLIES

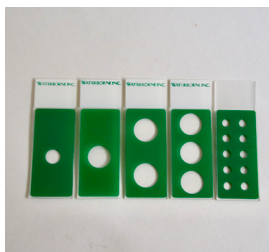
### DILUTION/BLOCKING BUFFER

Diluent created to dilute the 20x-concentrated antibodies to a 1X working dilution. Buffer is optimal for background reduction and prolonging storage of the antibody reagent. Contains PBS buffer, pH 7.4, bovine serum albumin, and sodium azide (0.04%).



PRODUCT NUMBER	PRODUCT DESCRIPTION
B100-20	Dilution/Blocking Buffer, 20 mL
B100-40	Dilution/Blocking Buffer, 40 mL

### SUPERSTICK™ SLIDES



Custom manufactured slides with chemically treated surface to maximize the adhesion of cysts, oocysts, spores, and other types of cells. Each slide has a green, Teflon-coated background surrounding the wells to ensure that the sample stays within the reaction well before and during drying. Each slide also has a super-frosted area at one end for writing with a pencil, pen, or marker.

PRODUCT NUMBER	PRODUCT DESCRIPTION
S100-1-9MM	SuperStick™ Slides, 40/box, 1 well - 9 mm well
S100-1	SuperStick™ Slides, 40/box, 1 well - 14 mm well
S100-2	SuperStick™ Slides, 40/box, 2 wells - 15 mm wells
S100-3	SuperStick™ Slides, 40/box, 3 wells - 14 mm wells
S100-10	SuperStick™ Slides, 40/box, 10 wells - 5 mm wells

### CELLGRIP™ SLIDES

Diagnostic slides with an adhesive-treated surface to increase the adhesion of cysts, oocysts, spores, and other types of cells. Slides have one 9 mm reaction well, a green hydrophobic, Teflon-coated background, and a super-frosted area at one end for writing with a pencil, pen, or marker.

PRODUCT NUMBER	PRODUCT DESCRIPTION
S100-1-CG	CellGrip™ Microscope Slides, 40/box, 1 well - 9 mm well



# STANDARD NO-FADE™ MOUNTING MEDIUM

This fade-retardant medium contains PBS, glycerol, formalin, and 2% DABCO. It is packaged in a 3.5 mL dropper bottle that releases approximately 45 uL per drop, enough medium for 75 applications when applying one drop per well. Ideal for repeated viewing of slides during short-term storage. See Figure 1 below.

PRODUCT NUMBER	PRODUCT DESCRIPTION
M101	No-Fade™ Mounting Medium

# FORMALIN-FREE NO-FADE™ MOUNTING MEDIUM

This fade-retardant medium contains PBS, glycerol and 2% DABCO. This medium does not contain formalin and is recommended for use in PCR genotyping. It is packaged in a 3.5 mL dropper bottle that releases approximately 45 uL per drop, enough medium for 75 applications when applying one drop per well. See Figure 2 below.

PRODUCT NUMBER	PRODUCT DESCRIPTION
M101FF	No-Fade™ Mounting Medium, Formalin Free

# ELVANOL NO-FADE™ MOUNTING MEDIUM

This medium is also fade-retardant and contains polyvinyl alcohol and DABCO. When allowed to dry overnight, Elvanol dries to a gelatinous, semi-solid film, allowing long-term storage and repeated viewing of immunofluorescent cells or tissue without messy leakage or drying out.\* Elvanol mounting medium may occasionally need to be heated briefly to remove cloudiness. It is packaged in a 3.5 mL dropper bottle that releases approximately 45 uL per drop, enough medium for 75 applications when applying one drop per well. See Figure 3 below.

\*Ideal for use with samples tested by collaborating laboratories. Slides can be shipped between laboratories for comparative viewing.

PRODUCT NUMBER	PRODUCT DESCRIPTION
M102	Elvanol No-Fade™ Mounting Medium



1



2



3

## BLOCKOUT™ COUNTERSTAIN

Counterstain is provided in a convenient dropper bottle that holds 3.5 mL Evan's Blue solution in PBS with 0.04% sodium azide. Counterstain provides a reddish background to give contrast to the specific green fluorescein reaction and reduce background fluorescence. (BlockOut™ counterstain will fluoresce red when viewed under a fluorescein filter set.) Excellent for use with complex matrices in environmental samples and fecal smears to reduce non-specific fluorescence.



PRODUCT NUMBER	PRODUCT DESCRIPTION
C101	BlockOut™ Counterstain

## SURERINSE™ WASH BUFFER

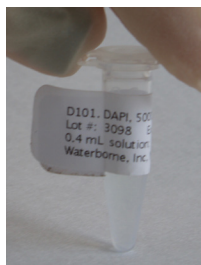
This buffer was developed to rinse excess reagent from well slides after incubation with a sample. It is available as a 20X concentrated solution that yields 1 L of 1x working dilution.



PRODUCT NUMBER	PRODUCT DESCRIPTION
WB100	20X SureRinse™ Wash Buffer, 50 mL
WB101	1x SureRinse™ Wash Buffer, 50 mL

## DAPI

A vial of 400 uL of 5000x concentrated (2 mg/mL) 4,6-diamidino-2-phenylindole (DAPI). This dye is required in US EPA Methods 1622, 1623, and 1623.1 for identification of *Giardia lamblia* and *Cryptosporidium parvum*. DAPI is used to stain the DNA in the nuclei of these organisms, which when viewed under UV light, the nuclei will fluoresce bright blue.



PRODUCT NUMBER	PRODUCT DESCRIPTION
D101	DAPI

## IMS-GRAB™ BEADS

Immunomagnetic separation (IMS) is a method used to isolate cells from a complex sample, e.g. biological specimens, cell culture, or environmental matrices. Antibody coated paramagnetic beads bind specifically to antigenic sites on the surface of target cells. In the presence of a magnetic field, the IMS particle-target cell complex is pulled toward the magnet, concentrating and isolating target cells. The IMS particles can be detached from the target cells to visualize and identify cells through immunofluorescence and DIC microscopy.

Waterborne Grab™ IMS beads are designed for use in the capture and isolation of *Giardia* spp. cysts or *Cryptosporidium* spp. oocysts, specifically for use in the IMS protocol in US EPA Methods 1622, 1623, and 1623.1. IMS-Grab™ beads consist of a monodisperse suspension of super-paramagnetic particles measuring 1.4-1.6 µm in diameter.

Note: IMS-Grab™ Bead kits are not EPA-validated. The dissociation step called for in the EPA methods may be omitted if separation of the IMS particles from the parasites is unnecessary. Please check our website for more information.

Each kit yields 20 tests, 100 µL per assay.

### KIT INCLUDES:

- Grab™ Beads, 2.0 mL (=20 tests)
- 2X Grab™ Buffer-A, 2X concentrated
- 1X Grab™ Buffer-B, 1X

### ITEMS REQUIRED FOR IMS PROCEDURE:

- |   |   |
|---|---|
| • Prepared Sample in 5.0 mL volume: Environmental Sample (not exceeding 0.5 mL packed pellet volume) or QC Standard | • Large magnetic particle concentrator, e.g. Dynal-Invitrogen MPC®-1 magnet or Dynal-Invitrogen MPC®-6 magnet       |
| • Grab™ Beads, 0.1 mL to be used per sample   | • Small magnetic particle concentrator, e.g. Dynal/Invitrogen MPC®-S magnet or Dynal/Invitrogen DynaMag-Spin magnet |
| • Grab™ Buffer-A at 2X conc., 5.0 mL per sample   | • 1.5 mL microtubes   |
| • Grab™ Buffer-B at 1X conc., 1.5 mL per sample   | • Timer   |
| • Flat-sided (Leighton) tube: 125 x 16 mm with 11 x 50 window (flat-side)   | • Vortex mixer  |
|   | • Rotating tube mixer (e.g. Dynal-Invitrogen 'Rotamix')   |

## GIARDIA AND CRYPTOSPORIDIUM OOCYST ISOLATION

### IMS 100. G/C COMBO-GRAB™

Combo-Grab™ beads are a combination of the two bead types described below, each provided in a separate vial.

PRODUCT NUMBER	PRODUCT DESCRIPTION	NUMBER OF TESTS	VOLUME
IMS100-20	Combo-Grab™	20 Tests	2.0 mL

## GIARDIA CYST ISOLATION

### IMS 300. GIARDIA-GRAB™

Giardia-Grab™ beads are coated with a monoclonal IgG antibody for the isolation of cysts of *Giardia*. See Figure 1 to the right.

PRODUCT NUMBER	PRODUCT DESCRIPTION	NUMBER OF TESTS	VOLUME
IMS300-20	Giardia-Grab™	20 Tests	2.0 mL

## CRYPTOSPORIDIUM OOCYST ISOLATION

### IMS 400. CRYPTO-GRAB™

Crypto-Grab™ beads are coated with a monoclonal IgM antibody for the isolation of oocysts of *Cryptosporidium*. See Figure 2 to the right.

PRODUCT NUMBER	PRODUCT DESCRIPTION	NUMBER OF TESTS	VOLUME
IMS400-20	Crypto-Grab™	20 Tests	2.0 mL



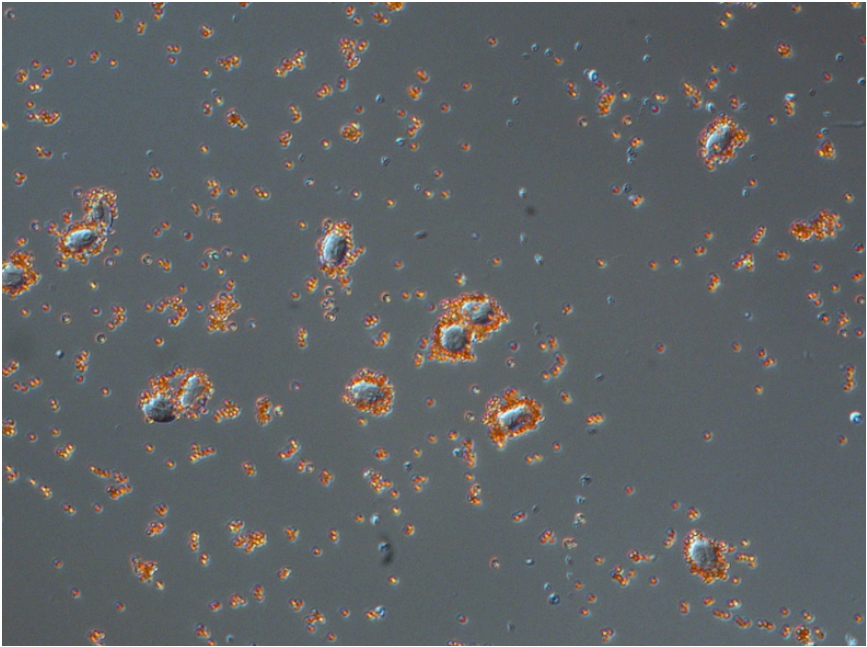


Fig 1. Giardia-Grab bound to *Giardia lamblia* cysts in suspension.

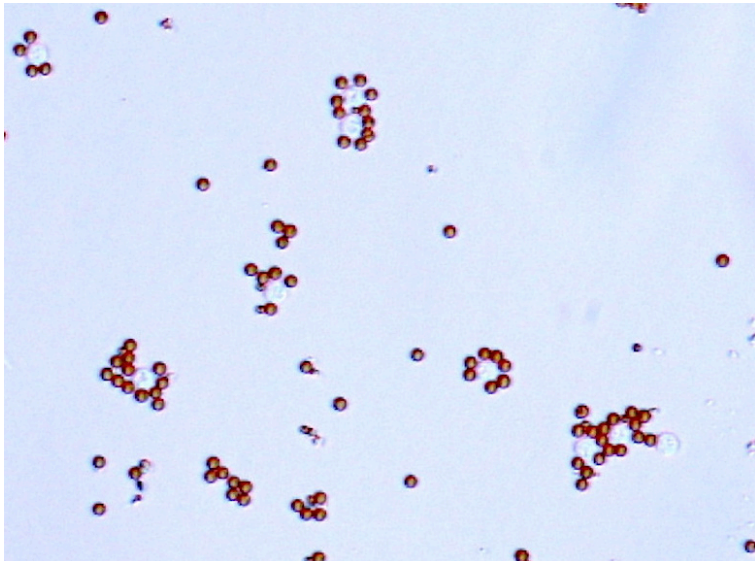
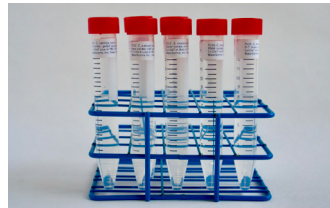
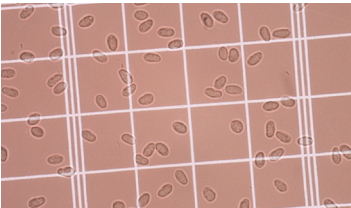


Fig. 2. Crypto-Grab bound to *Cryptosporidium parvum* oocysts in suspension.

## PARASITE PREPARATIONS

CATALOG NUMBER	MICROORGANISM	PRODUCTION SCHEDULE	SOURCE	INFECTIOUS TO MAN
P101	<i>Giardia lamblia</i> H3 isolate	Daily	gerbils	X
P102C P102M	<i>Cryptosporidium parvum</i> Iowa isolate	Every 4-6 weeks	calves/mice	X
P103C*	<i>Encephalitozoon cuniculi</i> Didier isolate	as needed	RK-13 cells	X
P103H*	<i>Encephalitozoon hellem</i> Didier isolate	as needed	RK-13 cells	X
P103I*	<i>Encephalitozoon intestinalis</i> Didier isolate	as needed	RK-13 cells	X
P104	<i>Cryptosporidium muris</i> RN66 rat isolate, Osaka, Japan	as needed	mice	
P105*	<i>Giardia muris</i> Roberts-Thomson isolate	as needed	mice	

\*For orders over 10/7 or for special order items, please give at least a 2 week lead-time.



All preparations are guaranteed to be 95%-99% purified. Each organism is purified by sucrose and percoll gradients and water washes, as needed.

Each suspension is then viewed microscopically for the contamination by various other microorganisms. Some bacteria and yeast may be present in small numbers.

Every preparation is accompanied by a Product Specification & Analysis Report/COA.



PARASITES CAN BE PROVIDED VIABLE OR NONVIABLE:

VIABLE

Standard preparation is PBS, antibiotics (penicillin, streptomycin, gentamicin, Amphotericin B) and 0.01% Tween 20. Volume and storage solution can be customized (e.g. PBS only, d-H<sub>2</sub>O only).

— OR —

NONVIABLE

FORMALIN

Suspended in 5% formalin and 0.01% Tween 20. Other storage solution options include lower or higher concentrations of formalin such as 1%, 2.5%, or 10%.

HEAT

TREATMENT\*

15 minute at 70° C to render organisms non-viable

FREEZE

TREATMENT\*

Stored between -20° C and -15° C for 24 hours to render organisms non-viable.

CUSTOM

TREATMENTS

Protocol provided by the investigator.

\*\$50.00 additional fee for treatment.

EACH ORDER MUST CLEARLY STATE  
WHETHER PARASITES SHOULD BE  
PREPARED LIVE IN PBS, D-H<sub>2</sub>O, OR  
FIXED IN FORMALIN.

## P101. CYSTS OF *GIARDIA LAMBLIA*\*

Human isolate H-3, aka CH-3, passaged through gerbils.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P101 @ 1x10/6	<i>Giardia lamblia</i> cysts, 1 million, in 4 mL
P101 @ 5x10/6	<i>Giardia lamblia</i> cysts, 5 million, in 8 mL
P101 @ 1x10/7	<i>Giardia lamblia</i> cysts, 10 million, in 8 mL
P101 @ 5x10/7	<i>Giardia lamblia</i> cysts, 50 million, in 8 mL
P101 @ 1x10/8	<i>Giardia lamblia</i> cysts, 100 million, in 8 mL

\*Live cysts are guaranteed for 21 days from the date of shipment.

## P102C. OOCYSTS OF *CRYPTOSPORIDIUM PARVUM*\*

Iowa isolate (bovine) from experimentally infected calves.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P102C @ 1x10/6	<i>C. parvum</i> oocysts, 1 million, in 4 mL
P102C @ 5x10/6	<i>C. parvum</i> oocysts, 5 million, in 8 mL
P102C @ 1x10/7	<i>C. parvum</i> oocysts, 10 million, in 8 mL
P102C @ 5x10/7	<i>C. parvum</i> oocysts, 50 million, in 8 mL
P102C @ 1x10/8	<i>C. parvum</i> oocysts, 100 million, in 8 mL
P102C @ 5x10/8	<i>C. parvum</i> oocysts, 500 million, in 8 mL
P102C @ 1x10/9	<i>C. parvum</i> oocysts, 1,000 million, in 50 mL

\*Live oocysts are guaranteed for 2 months from the date of shipment.

## P102M. OOCYSTS OF *CRYPTOSPORIDIUM PARVUM*

Iowa isolate (bovine) passaged once through experimentally infected mice.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P102M @ 1x10/6	<i>C. parvum</i> oocysts, 1 million, in 4 mL
P102M @ 5x10/6	<i>C. parvum</i> oocysts, 5 million, in 8 mL
P102M @ 1x10/7	<i>C. parvum</i> oocysts, 10 million, in 8 mL
P102M @ 5x10/7	<i>C. parvum</i> oocysts, 50 million, in 8 mL
P102M @ 1x10/8	<i>C. parvum</i> oocysts, 100 million, in 8 mL

\*Live oocysts are guaranteed for 2 months from the date of shipment.

## P103I. SPORES OF *ENCEPHALITOZOON INTESTINALIS*

Didier isolate, from culture with rabbit RK-13 cells. Please check availability.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P103I @ 1x10/6	<i>E. intestinalis</i> spores, 1 million, in 4 mL
P103I @ 5x10/6	<i>E. intestinalis</i> spores, 5 million, in 8 mL
P103I @ 1x10/7	<i>E. intestinalis</i> spores, 10 million, in 8 mL
P103I @ 5x10/7	<i>E. intestinalis</i> spores, 50 million, in 8 mL
P103I @ 1x10/8	<i>E. intestinalis</i> spores, 100 million, in 8 mL

\*Live spores are guaranteed for 2 months from the date of shipment.

## P103C. SPORES OF *ENCEPHALITOZOON CUNICULI*

Didier isolate, from culture with rabbit RK-13 cells. Please check availability.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P103C @ 1x10/6	<i>E. cuniculi</i> spores, 1 million, in 4 mL
P103C @ 5x10/6	<i>E. cuniculi</i> spores, 5 million, in 8 mL
P103C @ 1x10/7	<i>E. cuniculi</i> spores, 10 million, in 8 mL
P103C @ 5x10/7	<i>E. cuniculi</i> spores, 50 million, in 8 mL
P103C @ 1x10/8	<i>E. cuniculi</i> spores, 100 million, in 8 mL

\*Live spores are guaranteed for 2 months from the date of shipment.

## P103H. SPORES OF *ENCEPHALITOZOON HELLEM*

Didier isolate, from culture with rabbit RK-13 cells. Please check availability.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P103H @ 1x10/6	<i>E. hellem</i> spores, 1 million, in 4 mL
P103H @ 5x10/6	<i>E. hellem</i> spores, 5 million, in 8 mL
P103H @ 1x10/7	<i>E. hellem</i> spores, 10 million, in 8 mL
P103H @ 5x10/7	<i>E. hellem</i> spores, 50 million, in 8 mL
P103H @ 1x10/8	<i>E. hellem</i> spores, 100 million, in 8 mL

\*Live spores are guaranteed for 2 months from the date of shipment.

## P104. OOCYSTS OF *CRYPTOSPORIDIUM MURIS*

RN66 rat isolate from Osaka, Japan, passaged through mice.  
Please check availability.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P104 @ 1x10/6	<i>C. muris</i> oocysts, 1 million, in 4 mL
P104 @ 5x10/6	<i>C. muris</i> oocysts, 5 million, in 8 mL
P104 @ 1x10/7	<i>C. muris</i> oocysts, 10 million, in 8 mL

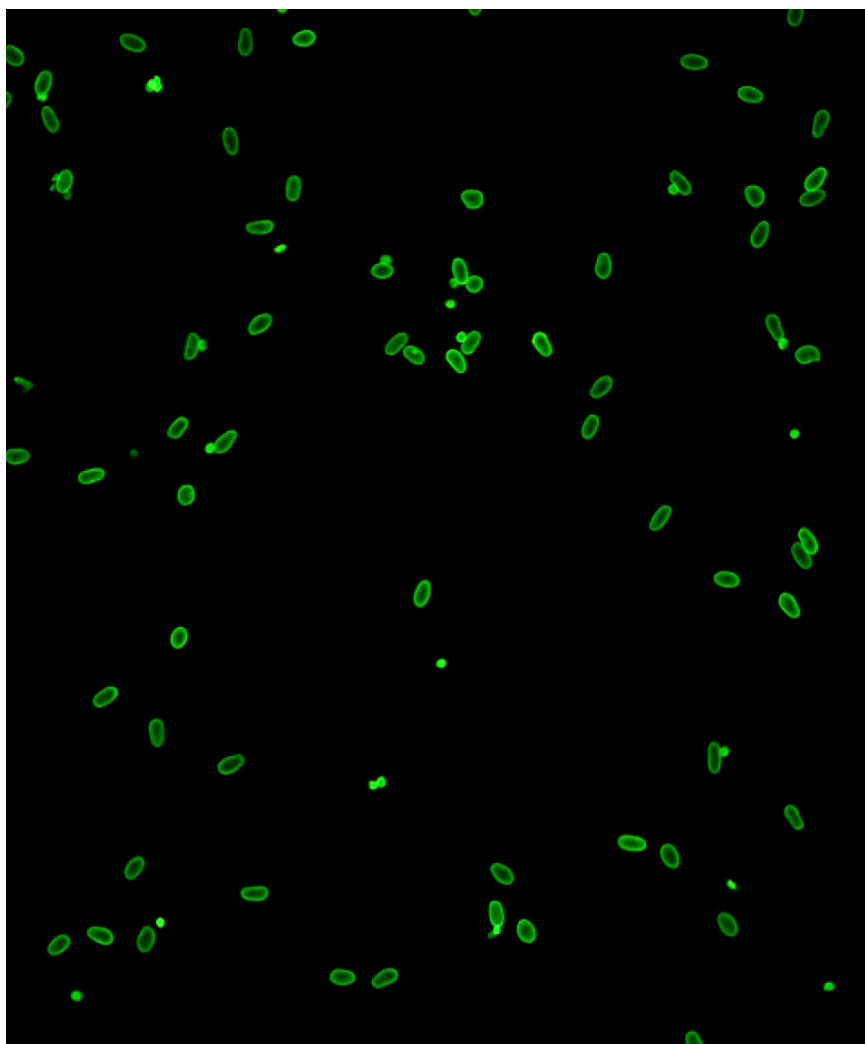
\*Live oocysts are guaranteed for 2 months from the date of shipment.

## P105. CYSTS OF *GIARDIA MURIS*

Roberts-Thomson isolate, from infected mice. Please check availability.

PRODUCT NUMBER	PRODUCT DESCRIPTION
P101 @ 1x10/6	<i>Giardia muris</i> cysts, 1 million, in 4 mL
P101 @ 5x10/6	<i>Giardia muris</i> cysts, 5 million, in 8 mL
P101 @ 1x10/7	<i>Giardia muris</i> cysts, 10 million, in 8 mL
P101 @ 5x10/7	<i>Giardia muris</i> cysts, 50 million, in 8 mL
P101 @ 1x10/8	<i>Giardia muris</i> cysts, 100 million, in 8 mL

\*Live cysts are guaranteed for 2 weeks from the date of shipment.



Please find ordering and shipping  
information on the next page.

## PLACING AN ORDER

### NEW AND RETURNING CUSTOMERS

1. You may order via phone, our website, fax, e-mail, or mail.
2. We accept the following methods of payment: purchase order, credit card (Visa or MasterCard), or bank wire. A \$50 bank wire fee will be assessed for international bank transfers.
3. Please include the catalog number, description, and quantity of items included in your order.
4. Waterborne™, Inc. reserves the right to put any order on hold until all requested information is collected.

### DOMESTIC CUSTOMERS

Please fill out our new customer order form, which can be found on our website at [waterborneinc.com/new-customer-order-form/](http://waterborneinc.com/new-customer-order-form/)

### INTERNATIONAL CUSTOMERS

1. If ordering live infectious agents, an import permit may be required. Clients are responsible for providing valid, signed import permits or other official documents if required by the country of the recipient. Waterborne™, Inc. is not responsible for keeping a copy of the import permit on file.
2. Infectious agents can only be shipped to clients located at established research or testing institutions. Orders for such items require official purchase orders from those institutions and must be shipped to an address located at that institution.
3. Clients are responsible for providing Broker information, if applicable.

### TERMS

Net 30 days. Payments may be wired directly to our bank. Please inquire as to our bank wiring information. We appreciate your prompt payment.

Note: Certain destinations may require pre-payment by bank wiring or other means.

## GENERAL SHIPPING INFORMATION

Waterborne™, Inc. currently uses Federal Express for all shipments unless otherwise specified.

If requested, Waterborne™ can ship using a customer's account through DHL, FedEx, UPS, or TNT.

Shipping rates are subject to change at any time. Please inquire about the current charge for your location.

DOMESTIC SHIPPING	INTERNATIONAL SHIPPING
All orders are shipped FedEx priority overnight with frozen gel packs unless otherwise specified.	All orders are shipped Ex Works (International Express Priority) with frozen gel packs unless otherwise specified. Include broker information at the time of the order.
<p><i>If the shipping charges are billed to a customer account, a handling fee will be assessed.</i></p> <p>International handling fees do not include international duty, value-added tax (VAT), GST tax, or customs-clearing charges that will be charged <u>directly to the customer</u> once the package enters the country.</p> <p><i>Waterborne™, Inc. will only accept responsibility for duties and taxes when specifically requested at the time of the order.</i></p>	
Domestic Handling Fee for Packages with Non-infectious Goods: \$15	International Handling Fee for Packages with Non-infectious Goods: \$30
Domestic Handling Fee for Packages with Infectious Goods: \$35	International Handling Fee for Packages with Infectious Goods: \$50
<p style="text-align: center;">Infectious Agent Packaging Fee</p> <p>A surcharge must be assessed for all orders of live, infectious parasites due to UN-approved requirements for special packaging and handling of infectious agents.</p>	
NOTE: These charges are in addition to the basic shipping costs.	

## DISTRIBUTORS

### ARGENTINA



#### Eurolab SA

Paraguay 2454 5° B (C1121ABN)  
Buenos Aires, Argentina  
Telephone: (54-11) 4966-1818  
FAX: (54-11) 4966-1818 int. 105  
Email: euroventas@eurolabsa.com.ar  
Website: www.eurolabsa.com.ar

### BRAZIL



#### UniTechUSA do Brasil Ltda.

R. Bertolino de Souza, 62, Vl. Unity  
Campinas / SP - CEP 13060-789  
Telephone: +55 19 4042 0171  
FAX: +55 19 4042 0171  
Email: celso@unitechusa.com  
Website: www.unitechbrasil.com

### CANADA



#### CEDARLANE®

4410 Paletta Court  
Burlington, ON Canada L7L 5R2  
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Toll-Free: 800-268-5058  
FAX: 289-288-0020  
Email: general@cedarlanelabs.com  
Website: www.cedarlanelabs.com

### CHINA



#### Beijing Anapure Bioscientific Co., Ltd.

Suite 20A, Grand Orient  
International Mansion No.2,  
Dong Zhi Men Wai Xiao Jie,  
Dongcheng District  
Beijing 100027 P.R. China  
Telephone: +86.10.8447.8816  
FAX: +86.10.8447.8830  
Email: zhong\_li@anapure.com

#### HONG KONG

#### Anapure Bioscientific (H.K.) Co., Ltd.

Unit 1404, Kodak House II  
321 Java Road, North Point,  
Hong Kong  
Tel: 852 - 25108161  
Fax: 852 - 25107345  
Email: kit\_wong@anapure.com.hk  
Contact: Mr. Kit Wong



#### Bio-Gene Technology, Ltd.

Unit 16, 20/F, Grandtech Centre, 8 on Ping  
Shatin, Hong Kong, PRC  
Telephone: +852-2646-6101  
FAX: +852-2686-8806  
Email: info@bio-gene.com.hk





### Gathersun International

#### Limited

Unit 9E1, Fortune  
Commercial Building  
No. 233 Dade Road,  
Guangzhou, China  
Telephone: 400-6688-001  
FAX: +86-20-8332-5973  
Email: info@gathersun.com  
Website: www.gathersun.com

### HONG KONG

#### Gathersun International Ltd.

Unit 706, Harry Centre  
49 Au Pui Wan Street  
Fo Tan, Sha Tin, Hong Kong  
Telephone: +852-2690-6583  
FAX: +852-3124-1183  
Email: orders@gathersun.com  
Website: www.gathersun.com

## COLOMBIA



### Aqualab Ltda (Colombia)

Carrera 10, No. 97-14, Bogota, Colombia  
Telephone: +57 1 610 8597  
FAX: +57 1 681 4062  
Email: aqualab\_ltdda@etb.net.co or  
0186aqua@etb.net.co

## ECUADOR



### Quimiem C. Ltda.

Ignacio San Maria E3-30 y Juan Gonzalez, Edf.  
Metropoli P2 Dep. 201  
Apartado postal: 1721293, Quito, Ecuador  
Telephone: +593 (2) 226 7057 / +593 (2) 246  
1500  
Cellular: +593 (9) 485 9725 / +593 (9) 485 9825  
Email: info@quimiem.com  
Website: www.quimiem.com

## GREECE & CYPRUS



### METROLAB S.A.

6-8 Spyridogianni str. 11522 Athens, Greece  
Telephone: +30 210 6468840  
FAX: +30 210 6463740  
Email: info@metrolab.gr  
Website: www.metrolab.gr

## ISRAEL



### New Biotechnology, Ltd. (NBT, Ltd.)

P.O. Box 8662, 3 Mekor Haim st. Jerusalem 91086  
Israel  
Telephone: +972-2-6732001  
FAX: +972-2-6731611  
Email: nbtsales@nbtltld.com  
Website: www.nbtltld.com

## JAPAN



### Veritas Corporation

Yashima Building, 2-7-14 Toranomom, Minato-ku  
Tokyo 105-0001, Japan  
Telephone: +81-3-3593-3211  
FAX: +81-3-3593-3216  
Website: www.veritastk.co.jp  
Website: www.nbtltld.com

## KOREA



### Young Sciences, Inc.

Flat 1304, Bldg 301, 3rd Buchun Technopark  
No.36-1, Samjung-dong, Ojung-gu  
Buchun-city, Gyunggi, Korea  
Telephone: (82)-32-624-4500  
FAX: (82)-32-624-4505  
Email: [info@youngscience.com](mailto:info@youngscience.com)

## MALAYSIA



**U.C. Sdn Bhd**

### U.C. Sdn Bhd

Suite 8-1-8 Level 1  
Menara Mutiara Bangsar  
Jalan Liku, Off Jalan Riong  
Bangsar, 59100 Kuala Lumpur, Malaysia  
Telephone: 03-22820162  
FAX: 03-22840470  
Email: [info@unicoll.com.sg](mailto:info@unicoll.com.sg)

## PORTUGAL



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Fax. +351 222 054 328  
Email: [iberlab@iberlab.pt](mailto:iberlab@iberlab.pt)  
Website: [www.iberlab.pt](http://www.iberlab.pt)

## ROMANIA



### SC MEDICLIM SRL

Str. Matei Basarab no. 47, Sector 3, Postal  
Code 030671  
Bucharest, Romania  
Telephone: 00 40 21 322 64 67  
FAX: 00 40 21 320 06 60  
Email: [office@mediclim.ro](mailto:office@mediclim.ro)  
Website: [www.mediclim.ro](http://www.mediclim.ro)

## RUSSIA



### Stylab, LLC

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+7 499 256 23 13  
FAX: +7 495 707 28 68, 662 64 15,  
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GSM: +7 495 729 17 04  
Email: [info@stylab.ru](mailto:info@stylab.ru)  
Website: [www.stylab.ru](http://www.stylab.ru)

## SINGAPORE



**Unison Collaborative**

### Unison Collaborative Pte Ltd

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Singapore 238875

Telephone: (65) 6734-5577

FAX: (65) 6734-4181

Email: info@unicoll.com.sg

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## SPAIN



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Local 2ª

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FAX: (+34) 886 137 284

Email: iberlab@iberlab.com

Website: www.iberlab.com

## TAIWAN



### MedClub Scientific Co., Ltd.

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R.O.C.

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FAX: 886-3-3279-268

Email: medclub@medclub.com.tw

Website: www.medclub.com.tw

## THE NETHERLANDS

### BELGIUM/

### LUXEMBOURG



### Selinion Medical

(The Netherlands)

P.O. Box 1722

5200 BT 's-Hertogenbosch

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FAX: 31+ (0) 73 844 00 44

Email: info@selinion.com

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Website: www.selinion.com

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