# **ENVI Assay System**



- High quality and proven test method
- The most compact "lab-in-a-box" in the market
- Unique simultaneous biological and chemical detection capability



## **ENVI Assay System**

### and ChemPro Reader Module



ENVI Assay System biodefence tests provide military and civil defence officers with a fast, simple and reliable solution for provisional, BWA identification from environmental samples.

Suspicious white powder letters, strange mist spreading in the air, leaking vials with unknown liquids and surfaces or soil to sample — no matter what the type or the form of a biological threat, early detection and BWA identification combined with timely warning, protection and correct medical countermeasures are crucial steps for the whole process of biothreat management.

#### **KEY FEATURES**

- Sensitive, specific and proven
- No special training required
- Unique workbench design
- High throughput in demanding working conditions
- Separate assays for ricin toxin, botulinum toxin, anthrax, pox, plague, tularemia and SEB

#### **APPLICATIONS**

- Law enforcement agencies
- CBRN special forces
- Mail security
- Private security services
- Customs and border control
- Airport security check
- Mobile laboratories
- EnviScreen CBRN Monitoring Systems

#### Bio Lab in a Box

ENVI Assay System Gold is built on handy and compact immunoassay format in which BWA-specific gold-labeled antibodies are utilized in capturing the BWA of interest from the sample. These rapid tests are suitable for both field and laboratory conditions with no requirement for special training, big investments or maintenance costs. In combination with a handheld ChemPro® Reader Module, the ENVI Assay System is all what you need for early indication of a biological threat.

### A Compact Solution Designed for Field Conditions

Traditional biological identification often includes time-consuming procedures, a variety of laboratory grade instrumentation and reagents that make the analysis challenging in field conditions. ENVI Assay System test kits are featured with practical tools and straightforward test methods giving fast response, specificity and sensitivity ideal for provisional biological threat assessment. They are designed for use with the ChemPro® Reader Module which enables long term data storage and enhances reliability of testing when working a in demanding environment. The small, lightweight and robust Reader Module, equipped with a belt clip, can be operated as an optional accessory to a ChemPro®100i Chemical Detector or with PC software meeting BWA identification needs in mobile and fixed systems. The Reader Module requires no calibration before use and can be easily decontaminated with various methods including spraying, immersing and steaming.

The ENVI Assay System Gold offers disposable, separate assays for seven highly poisonous agents: ricin toxin, botulinum toxin, anthrax, pox, SEB, yersinia pestis and francisella tularensis. ENVI Assay System test kits include all tools required for performing a test: test cartridges, sampling swabs, buffer solution vials with filter caps and antibody reagents and instructions for use — no separate sample collection kits are needed. The unique ENVI Assay System work bench design makes testing even easier, when wearing personal protective equipment. The water-resistant test package contains pre-determined regions into which the test tools like the test cartridges, swabs and buffer vials can be placed for performing a test.



## No Special Training Required – High Throughput in Testing

The ENVI Assay System test procedures are simple with only a few operational steps: sample collection, dilution, mixing and dosing the sample can be completed in seconds by following the graphical and written instructions provided. Test results (Positive/Negative) are ready in 15 -20 minutes for analysis with the ChemPro® Reader Module. Depending on the selected reading mode, it is possible to run and analyze 4 to 20 or even more ENVI Assay System tests in one hour. The Reader Module stores 100 test results in the Test Memo that can be recalled, erased and even transferred into a PC file.

### Supreme Multi-threat Detection Capability

There is no need to learn multiple detection devices with different user interfaces — ChemPro®100i Chemical detectors operated with ChemPro® Reader Modules and ENVI Assay System tests offer unique simultaneous chemical and biological detection in portable, battery-powered format. When you know how to use the ChemPro®100i, you know how to use the Reader Module as well: the chemical detector provides large keypad, clear display, power and user-friendly interface for this optional accessory.

### **Technical Data**

Package size 10 single-packed tests/kit

Kit contents Test cassette (10 pcs)

> Cotton swab for sampling (10 pcs) Sample vial with buffer solution (10 pcs)

Filter cap (10 pcs)

Short instructions (10 pcs) Package insert (1 pc)

**Detected biological** 

agents

Staphylococcal Enterotoxin B

Ricin toxin

Botulinum toxin A Basillus anthracis

Pox virus

Francicella tularensis Yersinia pestis

Air, soil, powders, liquids, surfaces Sample type

Response time 15 -20 minutes

Limits of Detection: **Sensitivity** 

Staphylococcal Enterotoxin B, SEB; 13 ng/ml sampler buffer

Ricin Toxin Test: 5 ng/ml sample buffer

Botulinum toxin A, BOT: 10 ng/ml sample buffer

Bacillus anthracis; 10<sup>5</sup> spores/ml

Pox virus: 3,5 x 10<sup>4</sup> CID50/ml

Francisella tularensis, Tularemia; 5 x 10<sup>5</sup> cells/ml

Yersinia pestis, Plague; 10⁵ cells/ml

**Specificity** No cross-reactivity with 18 - 23 interferants studied e.g. NaCl, talcum,

> dry yeast, baking powder, tryptone, powdered creamer, icing sugar, Turex WP-50, Virkon S, kaolin, bentonite chalk, wheat flour, barley flour,

sample buffer solution, forest soil, Sipernat D 10

Use with ChemPro® Reader Module

Optional, but highly recommended

Ordering information Kits of 10 tests:

E00240000 ENVI Assay System Gold Ricin Toxin Test

E00574000 ENVI Assay System Gold SEB Test

E00575000 ENVI Assay System Gold Botulinum Toxin Test

E08882000 ENVI Assay System Gold Anthrax Test E09481000 ENVI Assay System Gold Pox Test E09637000 ENVI Assay System Gold Tularemia Test E09636000 ENVI Assay System Gold Plague Test



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