

FilmArray® BioThreat System & Pouch

Information Sheet



A. FilmArray Instrument

B. BioThreat Pouch

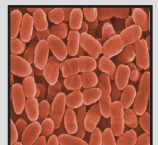
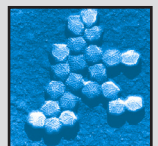
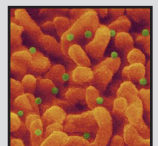
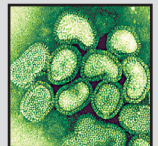
1. Fitment with freeze-dried reagents
2. Plungers deliver reagents
3. Sample lysis and bead collection
4. Wash station
5. Magnetic bead collection blister
6. Elution station
7. Multiplex first-stage PCR blister
8. Dilution blister
9. Second-stage nested PCR Array

Advanced Biological Detection

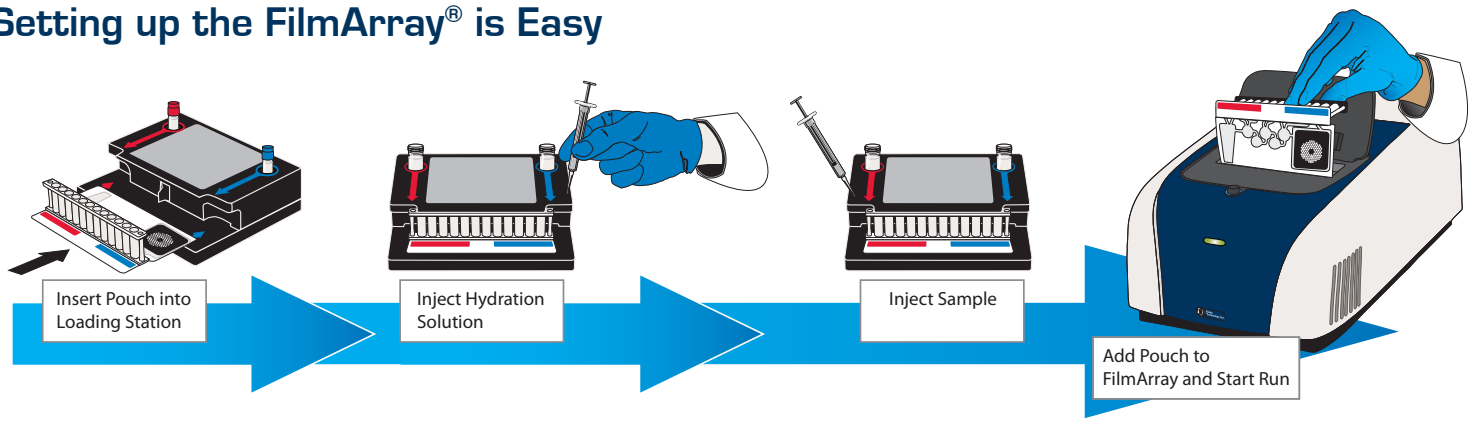
- **Dual-Use:** Used for BioThreat Detection and Pandemic BioSurveillance.
- **Fully Automated:** Sample prep, amplification, identification, and reporting.
- **Single Instrument Integration:** Reduce the amount of equipment and consumables.
- **Freeze-dried Reagents:** Room temperature stable.
- **Network:** Interoperable with global information grid.
- **Easy-to-Use:** Automated protocol requires limited hands-on time and training.
- **Quick Test Times:** Results in 1 hour.
- **More BioThreat Targets:** Test 17 pathogens in one run.
- **More Sample Types:** Integrated sample prep removes PCR inhibitors and allows BioThreat detection in challenging environmental sample types such as soil and clay.

The Following Targets are Tested with the FilmArray BioThreat Pouch:

- *Bacillus anthracis*, 3 Targets
- *Brucella species*, 2 Targets
- *Burkholderia*, 2 Targets
- *Clostridium botulinum*
- *Coxiella burnetii*, 2 Targets
- *Ebola virus*
- *EEE virus*
- *F. tularensis*, 2 Targets
- *Marburg virus*, 2 Targets
- *Ricinus communis*
- *Rickettsia*, 2 Targets
- *Staphylococcus aureus*
- *Variola*
- *VEE virus*, 2 Targets
- *WEE virus*
- *Yersinia pestis*, 2 Targets
- *Orthopox*, 2 Targets



Setting up the FilmArray® is Easy



Fully Automated Operation

The FilmArray reagents pouch contains all the required reagents for sample preparation, reverse transcription-PCR, PCR, and detection in a freeze-dried, room temperature stable format. Prior to a run, the operator injects hydration solution and the unknown sample into the pouch. The FilmArray instrument does the rest.

First, the FilmArray extracts and purifies all nucleic acids from the unknown sample. Next, the FilmArray performs a nested multiplex PCR. During the first-stage PCR, the FilmArray performs a single, large volume, massively multiplexed reaction. Last, individual singleplex second-stage PCR reactions detect the products from the first stage PCR.

Using endpoint melting curve data, the FilmArray software automatically generates a result for each target.

FilmArray™ Biothreat Panel		FilmArray™ Idaho Technology Inc.	
www.idahotech.com			
Run Summary			
Sample ID:	YBG21531	Run Date:	30 Sep 2010
Detected:	Bacillus anthracis		1:43 PM
	Yersinia pestis	Controls:	Passed
Equivocal:	Marburg virus		
Result Summary			
✓ Detected	Bacillus anthracis		
Not Detected	Clostridium botulinum		
Not Detected	Brucella species		
Not Detected	Burkholderia species		
Not Detected	Coxiella burnetii		
Not Detected	Ebola Zaire		
Not Detected	EEE virus		
Not Detected	Francisella tularensis		
↔ Equivocal	Marburg virus		
Not Detected	Orthopox genus virus		
Not Detected	Ricinus communis		
Not Detected	Rickettsia species		
Not Detected	Rickettsia prowazekii		
Not Detected	Staphylococcal enterotoxin gene		
Not Detected	Variola virus		
Not Detected	VEE virus		
Not Detected	WEE virus		
✓ Detected	Yersinia pestis		
Run Details			
Pouch:	Biothreat Panel v2.2	Protocol:	BT v1 PBS
Run Status:	Completed	Operator:	U. Grant
Serial No.:	00052751	Instrument:	ITI FA "AFA14"
Lot No.:	100920B		

The purchase of this product includes a limited, nontransferable instrument license under specific claims of one or more U.S. patents as listed on Idaho Technology, Inc.'s Web site (<http://www.idahotech.com/LegalNotices/>) (the "Web Site") and owned by the University of Utah Research Foundation and/or Idaho Technology, Inc. Any kits sold with this product and/or discussed herein (i) may be covered by one or more of the U.S. patents, as listed on the Web Site for the product and (ii) include a limited, nontransferable license to use the enclosed amount(s) in such kits according to the specified protocols.

Ordering Information

Catalog No.	Description
FLM1-ASY-0108	FilmArray BioDefense System – US Config.
FLM1-ASY-0109	FilmArray BioDefense System – EURO Config.
FLM1-ASY-0110	FilmArray BioDefense System – UK Config.
FLM1-ASY-0111	FilmArray BioDefense System – AUS Config.
RFIT-ASY-0094	BioThreat Pouch Kit
RFIT-ASY-0001	Respiratory Pouch Kit

System Specifications

Sample Handling

- Sample Types: Swab, liquid, culture, soil
- Sample Volume: 250 µL

Reagents

- Freeze-dried in durable plastic pouches
- Room temperature storage

Instrument Specifications

- Weight: 9 kg (20 lbs)
- Size: 25.4 x 39.3 x 16.5 cm (10 x 15.5 x 6.5 in.)

Power Requirements

- 90-264 VAC, 10 A

Performance Parameters

- Hands on time: Approx. 2 minutes
- Run turn-around time: 1 hour

Environmental Specification

- Operating: 15 °C to 30 °C at 20 to 80% humidity
- Storage: -30 °C to 65 °C

Desktop Software (Pre-loaded on supplied laptop)

- Windows-based instrument control and data analysis software
- Barcode reader for data input
- Automated qualitative analysis and reporting
- Separate advanced analysis software

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