



Strategic Diagnostics Inc.

# SDI-LIB



## Strategic Diagnostics Inc. *Listeria* Indicator Broth User's Guide

**Part Number 25004-100 (4×25 Test)**  
**Part Number 25005-100 (100 Test)**

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### Intended Use

Strategic Diagnostics Inc. *Listeria* indicator broth (SDI-LIB) is intended to be used in the food processing environment and on food contact surfaces to detect the presence of *Listeria* species. A color change from yellow to light brown/black is considered presumptive positive. Applicability of SDI-LIB is limited for selected common *Listeria* spp. (*Listeria monocytogenes*, *L. innocua*, *L. ivanovii*, and *L. welsmeri*) on selected common surface types (ceramic tile, stainless steel, plastic, and sealed concrete). **AOAC-RI PTM validation studies were conducted at 4 x 4 inch surface areas.**

### Scientific Principle of the Test

SDI-LIB contains a patent pending formula of antibiotics, growth enhancers, and color changing compounds. The antibiotics function synergistically to inhibit most non-*Listeria* microorganisms. Growth enhancers provide recovery nutrients to support the growth of sub-lethally injured *Listeria*. Indicator compounds will turn the broth from yellow to black by utilizing the  $\beta$ -glucosidase enzyme produced by *Listeria* species. A brown to black color 30-48 hours at 37°C indicates a presumptive positive test for *Listeria* spp. **Positive results can be read as early as 30 hours. Results cannot be considered negative until samples have been incubated for 48 hours.**

### Additional Notes

Strategic Diagnostics Inc. recommends the use of TECRA EnviroSwab (BioTrace International Bioproducts, Bothell, Washington, 425-398-7993) as a sampling device for increased reliability of SDI-LIB.

### Materials and Equipment Required

Tecra Enviroswabs for sampling and an incubator capable of maintaining 37°C  $\pm$  1°C (e.g. heat block, water bath, or air incubator).

### Confirmation Step

Presumptive positive samples from food contact surfaces or the food processing environment can be confirmed streaking presumptive positive samples onto commonly used selective *Listeria* agar plates such as Modified Oxford Agar or Palcam agars. Typical *Listeria* colonies (dark gray colonies with black zones, generally with dimples) on MOX are used in confirmation protocols given in FDA/BAM (1) or USDA (2) methods.

## Disposal

Decontaminate the SDI-LIB after use by autoclave, bleach or other disinfectants in accordance with local, state, and federal regulations.

## Product Shelf Life

SDI-LIB is stable at refrigeration temperatures. Shelf stability is 9 months at refrigerated temperatures. The expiration date appears on the label along with the lot number. Keep SDI-LIB away from light during storage.

## Precautions

1. *Listeria monocytogenes* is a dangerous human pathogen. When handling samples that possibly contain *L. monocytogenes*, extreme care should be taken to contain the samples and the enriched samples (presumptive positive tubes). Immuno-compromised individuals and pregnant women are particularly endangered by exposure to *L. monocytogenes* and should not be allowed in the vicinity of the testing.
2. WARNING: Some *Enterococci*, particularly *E. hirae*, *E. avium*, and *E. gallinarum* could be resulting in presumptive false positive results. However, all media that noticeably darkens in color must be streaked onto MOX. Because, *Enterococci* do not grow on MOX plates, false positive result remains at a presumptive level.
3. Use of SDI-LIB with some yellow-pigmented sponges should be avoided because of the likely enzyme activity suppression and the resulting possibility of false negative test results.
4. Do not use SDI-LIB past the expiration date that appears on the label.
5. Follow standard Good Microbiological Practices where appropriate.

(1) <http://www.cfsan.fda.gov/~ebam/bam-10.html>

(2) <http://www.fsis.usda.gov/Ophs/Microlab/MIg8.03.pdf>

## Ordering Information

Description	Part Number
SDI-LIB 4×25 Test	25004-100
SDI-LIB 100 test	25005-100

## Technical Assistance

To place an order or receive technical assistance, please call, fax, or email Strategic Diagnostics Inc. at:

Call toll-free **800-544-8881**

Or 302-456-6789 Phone

302-456-6782 FAX

[techservice@sdix.com](mailto:techservice@sdix.com)

## Warranties and Liabilities

Strategic Diagnostics Inc. ("SDI") warrants the Products manufactured by it will be free of defects in materials and workmanship when used in accordance with the applicable instructions for a period equal to the shorter of one year from date of shipment of the Product(s) or the expiration date marked on the Product packaging. Application protocols published by SDI are intended to be only guidelines for the Buyers of the Products. Each Buyer is expected to validate the applicability of each application protocol to in their individual applications. **SDI MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED. THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

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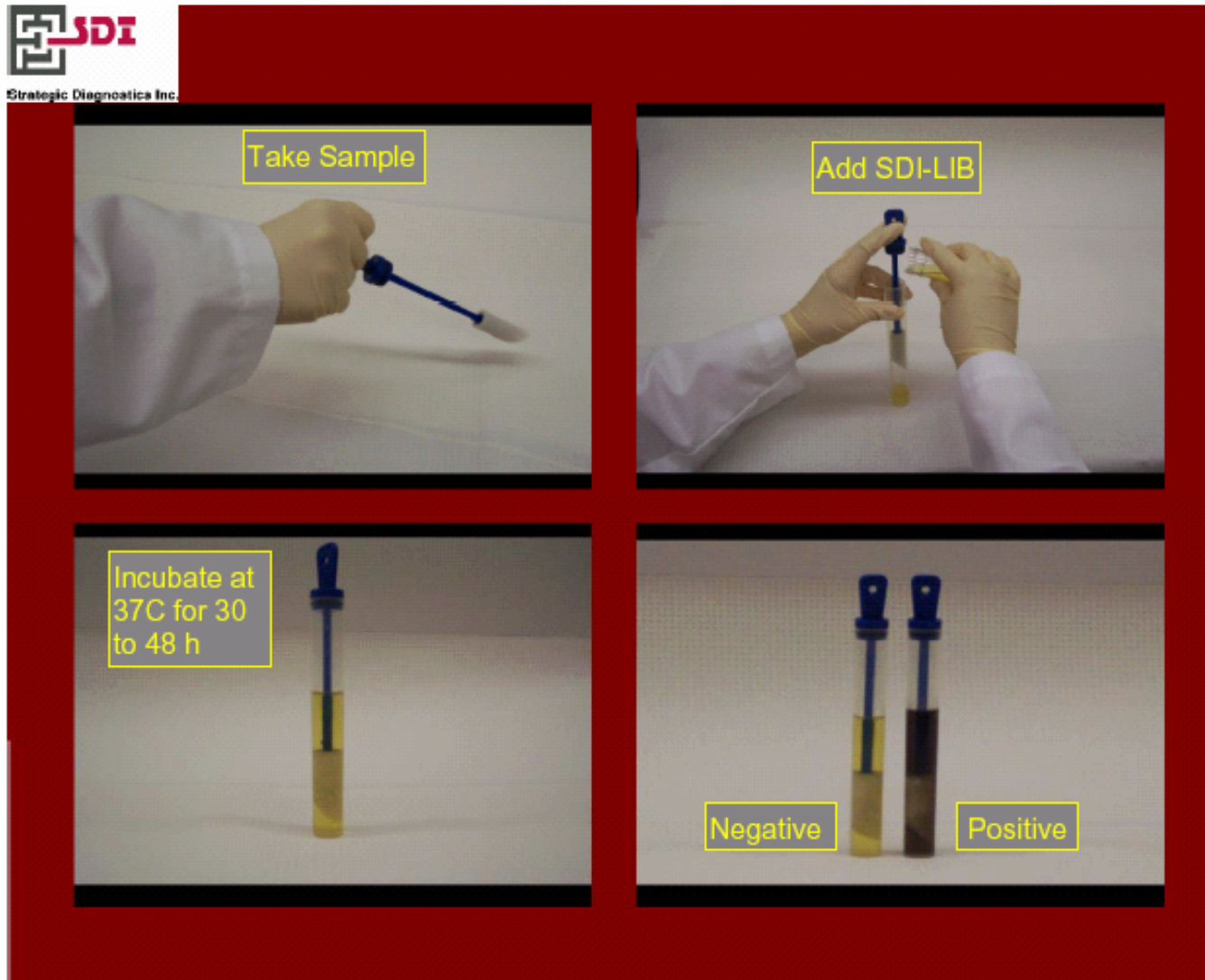
Version 1.1, May 24, 2006

## Instructions for Use: SDI-LIB for Environmental Samples



1. SAMPLING STEP: Take an environmental sample following USDA guidelines
  - Remove recommended sponge out of its sterile wrapping.
  - Sponge the 4" x 4" area to be tested.
  - Return the sponge into the original sampling container.
  - Aseptically add one unit (20 mL) of SDI-LIB on top of sponge in sampling container, snap close the sampling container.
  - Incubate upright (sponge fully submerged in SDI-LIB) at 37°C for 30 to 48 hours.
2. INTERPRETATION STEP: If color of the media changes from yellow/amber to brown/black, **30 to 48 hours** of incubation at 37°C, the sample is considered presumptive positive for *Listeria* spp. Positive results can be read as early as 30 hours. **Results cannot be considered negative until samples have been incubated for 48 hours.** (Note: Although SDI-LIB has been designed to provide results within 30 hours, 48 hours of incubation at 37°C has been shown to significantly improve the sensitivity of the test, and therefore highly recommended for maximum sensitivity). As with all experimental protocols, use of negative control (an unused swab containing one unit of SDI-LIB, incubated along side with the environmental samples) in each set of samples is recommended.

## Labor Saver Instructions for Use: SDI-LIB for Environmental Samples



For information, call Strategic Diagnostics Inc. at 800-544-8881.