

# DuPont Qualicon BAX<sup>®</sup> System

PCR ASSAY FOR *SALMONELLA*

## PRODUCT DESCRIPTION

*Salmonella* is one of the most common causes of food-borne illness, with about 1.4 million cases of Salmonellosis occurring annually in the United States. Various serotypes have been associated with meat, poultry, eggs, milk, fish, sauces, cream-filled desserts, peanut butter, chocolate and other foods. With an increase in antibiotic resistance and an upward prevalence trend in broilers, food processors need fast and accurate testing methods. Traditional isolation from culture requires many steps and more than four days to get results.



BAX<sup>®</sup> System PCR Assay

**Salmonella**

Part # D11000133

96 tests per kit

PCR tubes with tablets, optical caps,  
protease, lysis buffer

Store at 2-8°C

Stable to expiration date on label

### Benefits

- Speed – Next-day results
- Accuracy – Automated DNA-based analysis vs. subjective plate counts
- Exceptional sensitivity – Reliably detects 10<sup>4</sup> cfu/mL in enriched samples
- Ease of use – Tableted reagents reduce operator error
- Closed-cap system avoids amplicon contamination in the lab
- LIMS-compatible electronic data for easy storage, sharing and retrieval
- Designed for efficient workflow and reliable results

### Features

- Results in 3.5 hours processing
- Validated on a wide variety of foods
- Also validated on environmental samples, including stainless steel, ceramic tile, plastic, epoxy coated tile and concrete
- Also validated on ground beef, trim and produce with 8-hour enrichment in BAX<sup>®</sup> System E. coli O157:H7 MP media
- Specificity ≥ 98%
- Excellent inclusivity/exclusivity

### Certifications



**AOAC Research Institute** Performance Tested Method<sup>sm</sup> #100201 – Validated on meat, poultry, fruit and vegetable products, dairy, chocolate/bakery products, animal feeds, pasta and environmentals

**Emergency Response Validation (ERV)** Certificate for detecting *S. Typhimurium* in peanut butter



**AFNOR** validation certificate #QUA-18/3-11/02 – Certified according to AFNOR validation rules for all human food products, animal feed and environmental samples

**AOAC International** Official Method #2003.09

NordVal #30

### Adoptions

USDA-FSIS #MLG 4C.02

### Validations and Approvals

USDA-NPIP

Brazil MAPA

Russia Rospotrebnadzor

Health Canada

People's Republic of China AQSIQ

Danish Veterinary and Food  
Administration



The miracles of science™

**Sample preparation**



Prepare samples.

**Standard Media:**

Prepare 1:10 dilutions according to the sample type and incubate overnight at 35 ±1°C.

For samples requiring regrowth, transfer 10 µL of enriched sample to 500 µL of BHI and incubate at 35 ±1°C for 3 hours. Regrowth is not required for meat and poultry.

Step-by-step directions are detailed in the *BAX® System User Guide*, included with purchase.

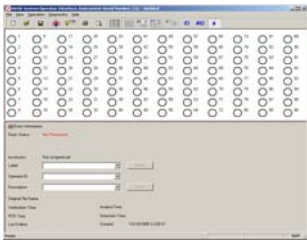
**BAX® System E. coli O157:H7 Media:**

Stomach sample 1:10 in prepared BAX® System E. coli O157:H7 enrichment media.

Incubate for 8-24 hours at 42°C.

**BAX® system protocol**

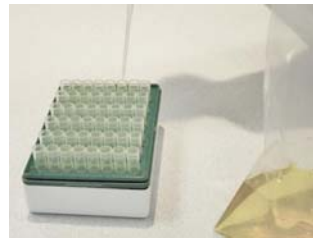
**8:00** Create rack file and warm up cyclor.



**8:05** Mix protease with lysis buffer and transfer 200 µL of lysis reagent to cluster tubes.



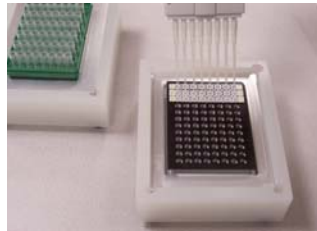
**8:10** Transfer 5-µL samples to cluster tubes.



**8:20** Heat cluster tubes for 20 minutes at 37°C, then 10 minutes at 95°C.



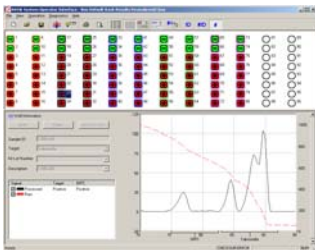
**8:50** Cool cluster tubes for 5 minutes in cooling block, then transfer 50 µL to PCR tubes in cooling block.



**9:00** Place sealed PCR tubes in cyclor and run program.



**12:30** Review results.



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