

DUPONT™ BAX® SYSTEM

PCR Assay for *Enterobacter sakazakii* (*Cronobacter* spp.)

Cronobacter (*Enterobacter sakazakii*) has been identified by the U.S. Food and Drug Administration as an emerging food-borne pathogen and environmental organism. *Cronobacter* outbreaks in the last few years have been associated with the consumption of contaminated milk-based powdered infant formula, which is heat-treated, but not sterilized, during production.



BAX® System PCR Assay

E. sakazakii

Part #D11801836

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 instead of subjective plate counts
- Exceptional sensitivity – Reliably detects 10⁵ 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
- Validation pending for powdered infant formula, dry dairy and soy ingredients and food production environmentals
- Developed in partnership with the Nestle Research Centre
- Specificity 98%
- Excellent inclusivity/exclusivity

Validations and Approvals

- Health Canada
- People's Republic of China AQSIQ



The miracles of science™

Sample Preparation



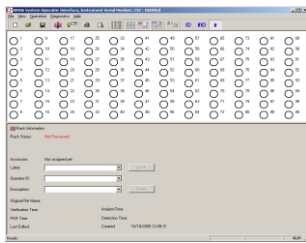
Primary enrichment: Prepare 1:10 dilutions of sample in mLST broth with vancomycin and incubate at 45 ±1°C for 20-22 hours.

Note: Primary enrichment for powdered infant formula may also be completed in BPW. For instructions, see the BAX® System User Guide, included with purchase.

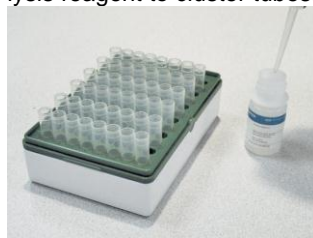
Regrowth: Add 10 µL enriched sample to 500 µL BHI and incubate at 37 C for 3 hours.

BAX® System Protocol

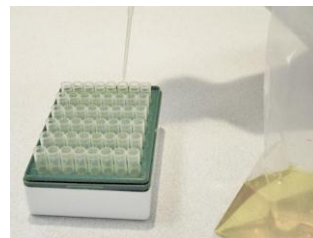
8:00 Create rack file and warm up cycler.



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



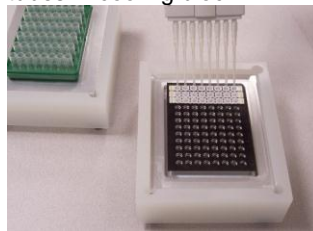
8:10 Transfer 5 µL samples to cluster tubes.



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



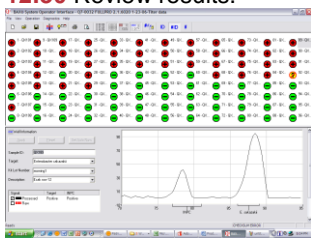
8:50 Cool cluster tubes for 5 minutes in cooling block, then transfer 50 µL to PCR tubes in cooling block.



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



12:30 Review results.



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