

DuPont Qualicon BAX[®] System

REAL-TIME PCR ASSAY FOR *E. COLI* O157:H7

PRODUCT DESCRIPTION

E. coli O157:H7 is a recognized foodborne pathogen found in raw beef and more recently in produce. It can cause serious and sometimes fatal illness at a very low infectious dose (as few as 10 organisms). The organism is often difficult to detect with traditional culture methods, especially where low levels of the target must be isolated from high levels of competing background flora.

The BAX[®] System uses DNA-based technology to provide same-day results that are reliable and reproducible, allowing food producers and processors to quickly and accurately release safe products to the market.

Features of the Real-Time PCR Assay

- Highly accurate – detects all known *E. coli* O157:H7, including rough strains
- Reliable – developed in collaboration with USDA ARS
- Real-world sample sizes – validated on beef and produce
 - 375 g beef trim
 - 65 g ground beef
 - 25 g spinach and lettuce
- Real-time processing – complete in 55 minutes
- Clear plus/minus results
- Single-stage enrichment in MP media
- Same-day results – as little as 10 hours for some matrices



BAX[®] System Real-Time PCR Assay *E. coli* O157:H7

Part # D14203648

96 tests per kit

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

Store at 2-8°C

Stable to expiration date on label

E. coli O157:H7 MP Enrichment Media

Bulk powder

Part #D12404925 - 2.5 kg makes 111 L

DuPont[™] StatMedia[™] soluble packets

Part #D12614061 - 30 x 75.9 g packets make 101.25 L

Part #D12745725 - 100 x 33.75 g packets make 150 L

Benefits of the BAX[®] System

- Speedy results help you make product decisions the same day
- Easy operation of automated instrument does not require advanced skills
- PCR tablets, conveniently packaged in individual PCR tubes, eliminate multiple liquid transfers of reaction reagents, providing consistency, stability, and reduced chance of operator error
- Closed-tube system avoids amplicon contamination in the lab
- LIMS-compatible electronic data allows for easy storage, sharing and retrieval

Designed for efficient workflow and reliable results

- Up to 96 tests can be completed in less than an hour
- Lysis reagents included for simplified DNA extraction
- No separate cell concentration steps required
- Step-by-step directions included in each package
- World-class customer support



The miracles of science[™]

Call 800-863-6842 today!

or visit our web site at www.qualicon.com to find out more.

Sample preparation



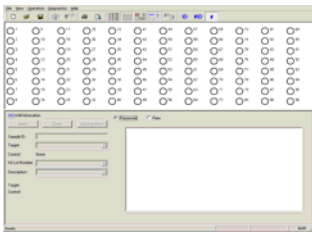
Beef trim (375g): Mix sample in 1:5 dilution with prepared BAX® System MP media broth. Incubate at 42±2°C for 10-24 hours.

Ground beef (65g): Stomach sample in 1:10 dilution with prepared BAX® System MP media broth. Incubate at 42±2°C for 9-24 hours.

Spinach and lettuce (25g): Stomach sample in 1:10 dilution with prepared BAX® System MP media broth. Incubate at 42±2°C for 8-24 hours.

BAX® System protocol

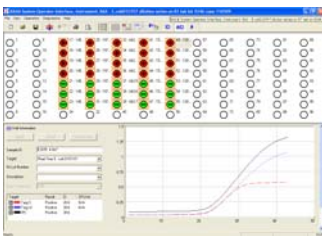
8:00 Create rack file and warm up cycler.



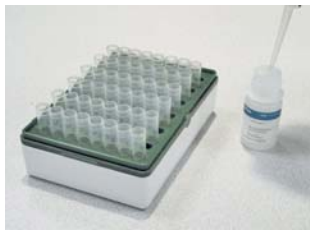
8:20 Heat cluster tubes for 20 minutes at 37°C, then 10 minutes at 95°C.



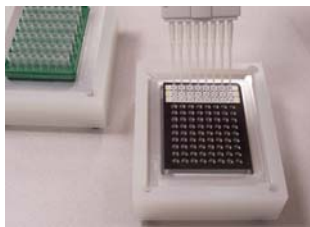
9:55 Review results.



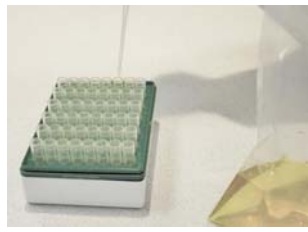
8:05 Mix protease with lysis buffer and transfer 200 µL of lysis reagent to cluster tubes.



8:50 Cool cluster tubes for 5 minutes in cooling block, then transfer 30 µL to PCR tubes in cooling block.



8:10 Transfer 20 µL samples to cluster tubes.



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



DuPont Qualicon
 ESL Bldg 400, PO Box 80400
 Wilmington, DE 19880-0400 USA
 Tel: 800-863-6842 or 302-695-5300
 Fax: 302-695-5301
 Europe: 00 800 3876 6838
 Singapore Tel: +65 6586 3635
 www.qualicon.com

