

BAX® System Q7

Real-Time PCR Assay for *E. coli* O157:H7 Exact +S

The BAX® System *E. coli* O157:H7 Exact +S Real-Time PCR Assay (KIT2043) combines highly specific detection of *E. coli* O157:H7 with an integrated **S-target process indicator**, providing pathogen results and actionable process insight in a single assay.

Designed for beef processors and commercial testing laboratories, the assay provides clear, reliable results in approximately **55 minutes** following enrichment and lysis. Its streamlined workflow and integrated internal controls help reduce handling errors, support consistent performance, and increase confidence in every result.

The S-target provides an additional operational metric that can be incorporated into a **Sanitary Dressing Index (SDI)** or other process-monitoring program. Trending this result can help food processors evaluate sanitary dressing performance, identify changes in process control, and take preventive action to reduce risk.

By combining accurate pathogen detection with actionable process information, the BAX System *E. coli* O157:H7 Exact +S assay helps laboratories make faster product disposition decisions, reduce inventory hold times, and strengthen preventive food safety programs.



Features & Benefits:

- **Two Results, One Reaction:** Detects *E. coli* O157:H7 while simultaneously monitoring the S-target process indicator
- **Highly Specific Detection:** Single genetic target for *E. coli* O157:H7 provides clear, reliable result that support confident product disposition decisions.
- **Actionable Process Insight:** Enables S-target trending within a Sanitary Dressing Index (SDI) or other process monitoring program.
- **Rapid Turnaround:** Short 8-hour enrichment and PCR results delivered in 55 minutes following enrichment and lysis to help reduce inventory hold times.
- **Workflow compatibility:** Runs on the BAX System Q7 alongside STEC Suite of BAX assays using a harmonized workflow.
- **Simplified workflows:** Minimal components to maximize efficiency and ease-of-use.
- **Integrated internal controls:** Verify each reaction and provide added confidence in test performance
- **Colony Confirmation:** Suitable for colony confirmation from other methods (non-RT Exact +S-derived colonies).
- **Trend it in SureTrend®:** Chart S-target results over time in Hygiena's SureTrend Food Safety Management software to see shifts against your baseline.

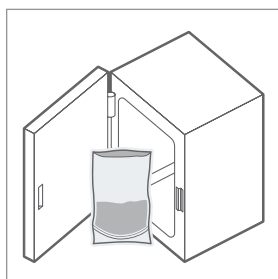
Validations, Certifications & Approvals:

AOAC Research Institute Performance Tested MethodSM #032602

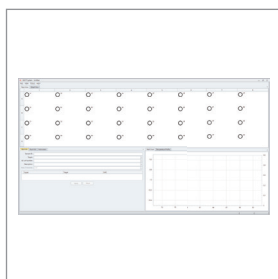
- Sampling cloth (such as MicroTally® cloth) from raw beef trim (375 g), raw ground beef (375 g) and spinach (375 g), plus ground beef and beef trim (325 g in mTSB); 375 g beef trim alone.

Product No.	Description	Quantity
KIT2043	BAX® System <i>E. coli</i> O157:H7 Exact +S Real-Time PCR Assay	96 tests per kit

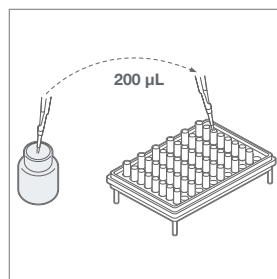
BAX System Protocol*



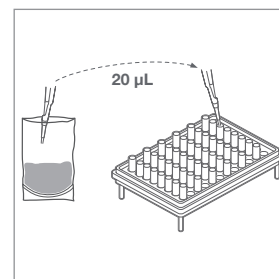
Enrich samples.



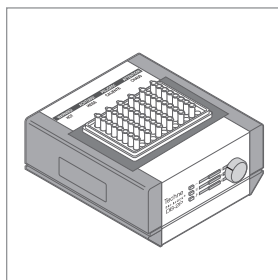
Create rack file and warm up cycler.



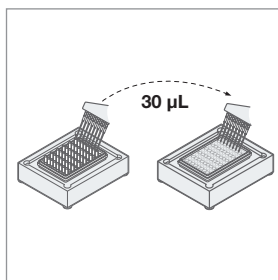
Add protease to lysis buffer bottle, mix, then dispense 200 µL of solution into cluster tubes.



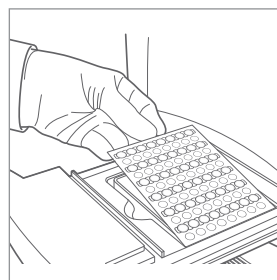
Transfer 20 µL sample enrichment to cluster tubes.



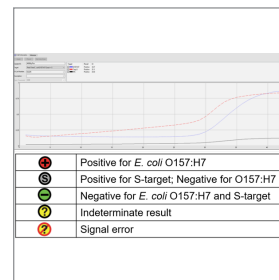
Place samples on automated thermal block for lysis and cooling.



After transferring lysates to PCR tubes in a cooling block, hold for 10-30 minutes.



Place sealed PCR tubes in cycler and immediately click "NEXT" to run program.



Review results.

*Refer to the Product Instructions for detailed PCR protocol steps.

Related Products

BAX® System MP Media

Available enrichment media for customers looking to take full advantage of rapid time-to-results and ease-of-use offered by select BAX System *E. coli* and *Salmonella* assays.

StatMedia™ Soluble Packets

Gamma-irradiated BAX System MP Media in convenient, water-soluble packets for reduced mess and easy preparation. Simply drop in pre-warmed sterile water and mix before adding sample.

BAX® System Real-Time PCR Assays – STEC Suite

Designed to identify the top six non-O157 Shiga toxin-producing *E. coli* (STEC) strains defined by the USDA Food Safety and Inspection Service (FSIS) as adulterants in the United States' beef industry.

BAX® System Real-Time PCR Assay for *Salmonella*

Uses real-time PCR technology to reduce processing time to about one hour, helping food companies make product release decisions with speed and confidence.

Product No.	Description	Quantity
MED2003	BAX® System MP Media	2.5 kg
MED2016	StatMedia™ Soluble Packets	20 x 5 x 33.75 g
KIT2021	BAX® System Real-Time PCR Assay for STEC Screening	96 tests per kit
KIT2008	BAX® System Real-Time PCR Assay for STEC Panel 1	48 tests per kit
KIT2009	BAX® System Real-Time PCR Assay for STEC Panel 2	48 tests per kit
KIT2006	BAX® System Real-Time PCR Assay for <i>Salmonella</i>	96 tests per kit