

# BAX® System Q7

## Real-Time PCR Assay - STEC Suite

The BAX® System Real-Time PCR assay suite for STEC is designed to identify the top six non-O157 Shiga toxin-producing *E. coli* (STEC) defined by the USDA Food Safety and Inspection Service (FSIS) as adulterants in the United States beef industry. The BAX System STEC suite can help food companies test for these pathogens and make product release decisions with confidence. The screening assay for *stx* and *eae* clears negative samples fast, while two multiplex panel assays detect and differentiate the top six STEC serogroups.



### Features & Benefits:

- Clear yes-or-no results in as little as 9 hours for select matrices
- Approved by the United States Department of Agriculture Food Safety and Inspection Service (USDA FSIS) for confirming the presence of Shiga toxin genes in meat products and carcass and environmental sponges
- STEC Screener: multiplex technology generates a positive when both *stx* and *eae* targets are detected
  - *Stx* only option generates a positive result any time *stx* is detected, even in absence of *eae*
- STEC Panel 1 and Panel 2: multiplex technology generates a positive when any one of three *E. coli* serogroups are detected
- Internal controls included to validate results even in absence of target
- Compatible with many other BAX System assays for efficient processing



QUA 18/11 - 12/20  
Alternative Analytical  
Methods for Agribusiness  
<http://nf-validation.afnor.org/en>

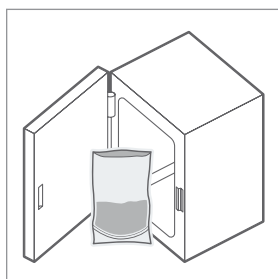


### Validations, Certifications and Approvals:

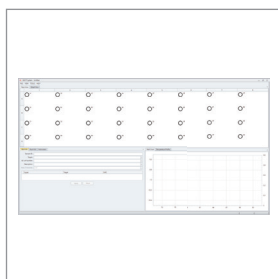
- **AOAC Research Institute**  
*Performance Tested Method*™ #091301  
Validated for raw ground beef, raw ground beef with soy, raw beef trim, flour, dried cannabis flower, dried hemp flower, and sampling cloths swabbed from beef trim portions (375 g).
- **NF VALIDATION – certificate granted by AFNOR Certification** QUA 18/11 – 12/20  
Validated according to AFNOR validation rules for for raw beef meats, raw dairy products and vegetables.
- **USDA-FSIS**  
#MLG 5B.09  
For Shiga toxin confirmation in meat products, carcass sponges and environmental sponges.

| Product No. | Description                                        | Quantity         |
|-------------|----------------------------------------------------|------------------|
| 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 |

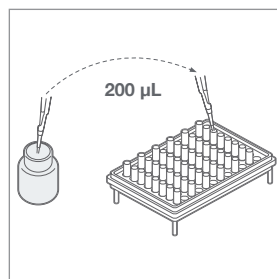
## BAX System Protocol\*



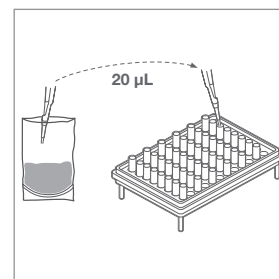
Enrich samples.



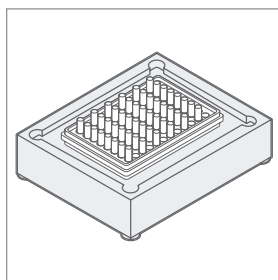
Create rack file and warm up cycler.



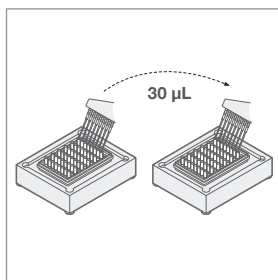
Mix protease with lysis buffer and dispense 200 µL of solution into cluster tubes.



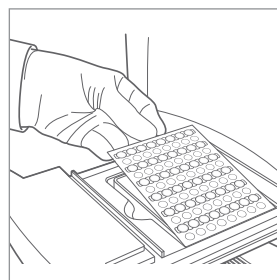
Transfer 20 µL sample enrichment to cluster tubes.



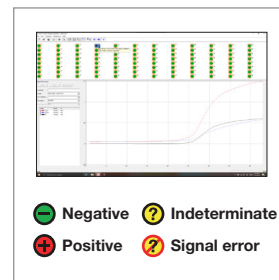
Place samples on automated thermal block for lysis and cooling.



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 Ready Reference Guide for detailed steps.

## Related Products

### BAX® System Real-Time PCR Assay for *E. coli* O157:H7

Real-time PCR assay providing same-day results that are reliable and reproducible, allowing food producers and processors to quickly and accurately release safe products to the market.

### BAX® System MP Media

Available enrichment media for customers looking to take full advantage of the rapid time-to-result 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 preparation. Simply drop in pre-warmed sterile water and mix with sample.

### 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         |
|-------------|------------------------------------------------------------|------------------|
| KIT2000     | BAX® System Real-Time PCR Assay for <i>E. coli</i> O157:H7 | 96 tests per kit |
| MED2003     | BAX® System MP Media                                       | 2.5 kg tub       |
| MED2016     | StatMedia™ Soluble Packets                                 | 20 x 5 x 33.75 g |
| KIT2006     | BAX® System Real-Time PCR Assay for <i>Salmonella</i>      | 96 tests per kit |