

## 3M Molecular Detection Assay for *E. coli* O157 (including H7) Receives AOAC-PTM Approval

-Certification validates system's ability to detect the *E. coli* organism, a common cause of foodborne illnesses-

Today, 3M Food Safety announced that it received AOAC-PTM Certification (#071202) for its new 3M™ Molecular Detection Assay for *E. coli* O157 (including H7) from the AOAC Research Institute's Performance Tested Methods<sup>SM</sup> Program. The certification gives food processors greater assurance in safeguarding against pathogenic *E. coli*, a causative agent of foodborne illness responsible for an estimated 73,000 cases annually in the U.S. and second only to *Salmonella* in the number of outbreaks.

Introduced in December 2011, the 3M™ Molecular Detection System combines two innovative technologies – isothermal DNA amplification and bioluminescence detection – to provide a fast and reliable method of pathogen detection in enriched food, feed and food process environmental samples. Determined to be equivalent to standard FDA and USDA reference methods for the detection of *E. coli* O157, this AOAC-PTM certification validates 3M's new molecular approach for pathogen detection.

The PTM validation of *E. coli* O157 follows an earlier validation of the *Salmonella* assay from the AOAC Research Institute, which bases certification of methods on independent study results demonstrating that a given method meets its product performance claims as expressed in the product package insert. For the 3M Molecular Detection Assay *E. coli* O157 method PTM study, artificially contaminated samples were enriched and evaluated by the 3M Molecular Detection System as compared to the appropriate FDA or USDA FSIS reference method. Sample groups evaluated included raw ground beef, bagged spinach and sprouts, and no statistically significant differences were found in sample results between the 3M Molecular Detection Assay *E. coli* O157 (including H7) and reference methods.

"We are very excited about this validation and what it means for the 3M Molecular Detection System," said DeAnn Benesh, regulatory affairs specialist with 3M Food Safety. "AOAC-PTM approval of 3M's *Salmonella* and *E. coli* O157 (including H7) assays are the first of numerous validations for this product line, emphasizing the value of a pathogen detection solution that is fast, accurate, easy-to-use and affordable."

The company developed the 3M Molecular Detection System and its test kits with the needs of its worldwide food processing clientele in mind, involving them early in the design process. As a result, a small but powerful technology was produced, capable of targeting and amplifying nucleic acid in enriched samples with excellent sensitivity and specificity.

For more information, visit [www.3M.com/3MMolecularDetectionSystem/ECOAOAC](http://www.3M.com/3MMolecularDetectionSystem/ECOAOAC).

AOAC RI, based in Gaithersburg, MD, is a subsidiary of AOAC International, a globally recognized, independent, not-for-profit association founded in 1884. AOAC serves communities of the analytical sciences by providing the tools and processes necessary to develop voluntary consensus standards or technical standards through stakeholder consensus and working groups in which the fit-for-purpose and method performance criteria are established and fully documented. AOAC provides a science-based solution and its Official Methods of Analysis gives defensibility, credibility and confidence in decision-making. AOAC Official Methods are accepted and recognized worldwide.

3M Food Safety is a leader of innovative solutions that help the food and beverage industries optimize the quality and safety of their products to enable consumer protection. At every step, 3M Food Safety provides

solutions that help mitigate risk, improve operational efficiencies and impact the bottom line. Follow us on Twitter @3M Food Safety.

3M captures the spark of new ideas and transforms them into thousands of ingenious products. Its culture of creative collaboration inspires a never-ending stream of powerful technologies that make life better. 3M is the innovation company that never stops inventing. With \$30 billion in sales, 3M employs 84,000 people worldwide and has operations in more than 65 countries. For more information, visit [www.3M.com](http://www.3M.com) or follow @3MNews on Twitter.

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