INTRODUCTION

Campylobacter are one of the main causes of foodborne disease in developed countries, responsible for significant economic burden worldwide. Of the disease-causing strains, the most common are the thermotolerant species *C. jejuni* and *C. coli* which have primary reservoirs in poultry. Control of these organisms relies upon effective screening techniques that allows producers to respond to contamination with enhanced hygiene control strategies.

The Thermo Scientific™ SureTect™ Campylobacter jejuni, *C. coli* and *C. lari* PCR Assay detects and differentiates three thermotolerant species of *Campylobacter* from food and environmental samples.

KIT FORMAT

The SureTect *Campylobacter* multiplex PCR solution comprises one multiplex reaction for the simultaneous detection of the following targets: *C. jejuni*, *C. coli* and *C. lari*.

WORKFLOW

Matrix Selection - Enrichment - Lysis - PCR

Raw Poultry Meat - Bolton Broth 22–48 hours 42 ºC
Poultry Carcass Rinses - Bolton Broth 24–48 hours 42 ºC
Chicken Nuggets - Bolton Broth 22–48 hours 42 ºC

APPLICATION

Meat matrices tested at 25 g with 1-in-10 dilution in pre-warmed broth medium, rinses tested at 30 mL with 1-in-2 dilution in pre-warmed broth medium

INSTRUMENTATION

Applied Biosystems™ SimpliAmp Thermal Cycler

Applied Biosystems™ QuantStudio™ 5 Food Safety Real-Time PCR System

QuantStudio™ 5 Food Safety System

Laptop with RapidFinder Analysis software

SimpliAmp Thermal Cycler

SureTect PCR Assays

CONFIRMATION TECHNIQUES

Samples that returned a positive PCR result are confirmed with a direct streak of the enrichment broth onto selective plating media (mCCDA or Thermo Scientific™ Oxoid™ Brilliance™ CampyCount Agar) followed by species confirmation of presumptive positive colonies.

VALUE ADDED

Three species detected from a single sample in a single reaction

Enhanced specificity of *Campylobacter* species targets over other PCR tests

The SureTect workflow utilises non-proprietary Bolton Broth without the need for blood addition or gas jars

TRADEMARKS/LICENSES

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