

# VIASURE MULTIPLEX

*Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit*

## Pathogen and product description

**S**almonella causes two types of diseases: typhoid fever and acute gastroenteritis commonly referred to as salmonellosis. Transmission of *Salmonella* occurs through contaminated food (poultry, poultry products, beef, pork, eggs, milk, and seafood), water or contact with infected animals. Patients infected with *Salmonella* frequently suffer nausea, vomiting, abdominal cramps/pains, achiness, fever, intense diarrhea and/or headache.

The most common species of *Campylobacter* associated with human illness are *C. jejuni* and *C. coli*, but other species can also cause human infections. Risk factors include consumption of animal products and water, contact with animals, and even person-to-person transmission (fecal-oral or via fomites). Infection with *Campylobacter* causes gastroenteritis characterised by fever, vomiting, headaches, and abdominal pain with watery or

bloody diarrhea, for a median duration of 6 days.

*Yersinia enterocolitica* is a foodborne pathogen and its clinical manifestations typically include nausea, vomiting, abdominal pain, diarrhea and fever. There is a strong evidence that the food of animal origin especially pork and dairy products are responsible for human infections.

VIASURE *Salmonella, Campylobacter & Yersinia enterocolitica* Real Time PCR Detection Kit is designed for the diagnosis of the *Salmonella, Campylobacter* and/or *Yersinia enterocolitica* in human stool samples. After DNA isolation, the identification of *Salmonella, Campylobacter* and/or *Yersinia enterocolitica* is performed by the amplification of a conserved region of the *invA* gene for *Salmonella*, *16S rRNA* gene for *Campylobacter* and *ail* gene for *Yersinia enterocolitica* (if present), using specific primers and a fluorescent-labelled probe.

### Lyophilised product

"Ready & Easy-to-use" Kits



Long term stability.  
Transport and storage at room temperature



Shelf-life: 24 months  
(for all our qPCR products)



From 1 up to 96 samples per assay



High sensibility, specificity and reproducibility



Validated according to ISO 13485 and CE marked



THE REAL ONE STEP qPCR

**Analytical sensitivity**

**VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit** has a detection limit of  $\geq 10$  DNA copies per reaction for Salmonella, Campylobacter and Yersinia enterocolitica (figures 1, 2 and 3).

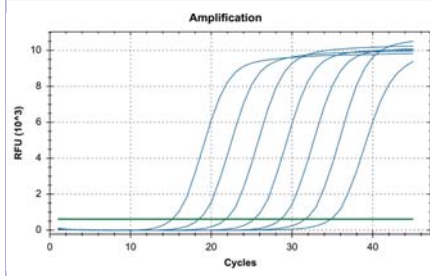


Figure 1. Dilution series of Salmonella ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System FAM channel).

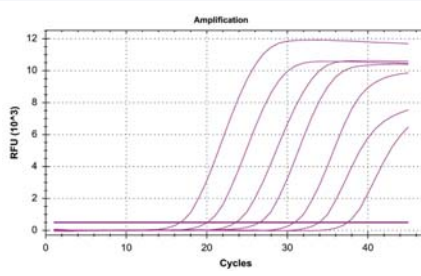


Figure 2. Dilution series of Campylobacter ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Cy5 channel).

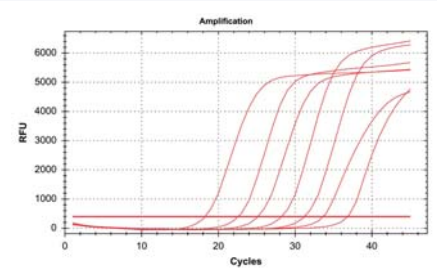


Figure 3. Dilution series of Yersinia enterocolitica ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (ROX channel).

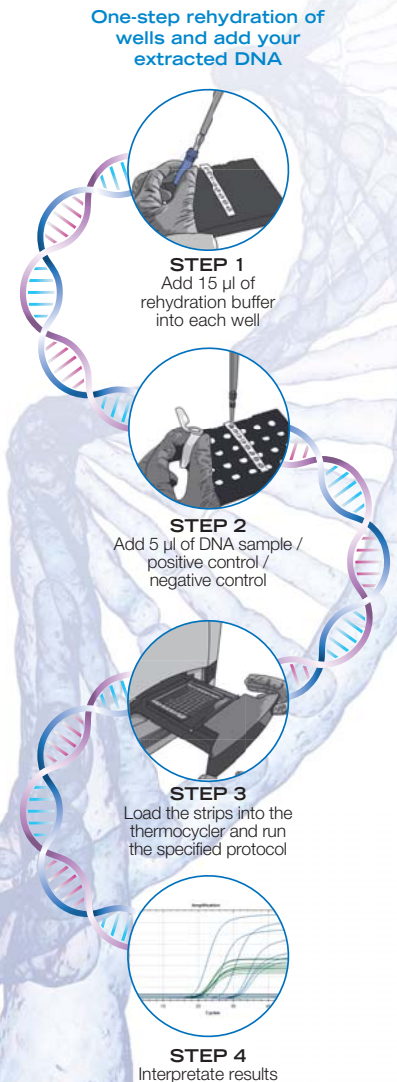
**Components**

Reagent/Material	Description	Quantity
Salmonella, Campylobacter & Y. enterocolitica 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
Salmonella, Campylobacter & Y. enterocolitica 96-well plate	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	1 plate
Rehydration Buffer	Solution to reconstitute the stabilized product	1 vial x 1,8 mL
Salmonella, Campylobacter & Y. enterocolitica Positive Control	Non-infectious synthetic lyophilized cDNA	1 vial
Negative Control	Non template control	1 vial x 1 mL
Water RNase/DNase free	Water RNase/DNase free	1 vial x 1 mL
Tear-off 8-cap strips	Optical caps for sealing wells during thermal cycling	6/12 x 8-cap strip
Shell Frame Grid	Shell Frame Grid	1 or 2

**Kit References**

Reference	Description
VS-SCY106L	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-SCY106H	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-SCY112L	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-SCY112H	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-SCY113L	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 96-well plate, low profile
VS-SCY113H	VIASURE Salmonella, Campylobacter & Y. enterocolitica Real Time PCR Detection Kit 96-well plate, high profile

**Work Flow**



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