

VIASURE MULTIPLEX

Salmonella, Campylobacter & Shigella/EIEC 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. Other risk factors include consumption of animal products and water, contact with animals, and even person-to-person transmission (fecal-oral or via vomites). 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.

Shigellosis is a dysentery characterized by severely

bloody and mucus-containing diarrhea. The disease is caused by any of the four species of *Shigella* (*S. dysenteriae*, *S. flexneri*, *S. boydii* and *S. sonnei*) and by enteroinvasive *Escherichia coli* (EIEC). The differentiation of *Shigella* and enteroinvasive *E. coli* is complicated due to the ability to cause dysentery using of the same method of invasion. *Shigella* is a significant agent of foodborne illness, especially with foods that require hand processing and/or are prepared from raw or previously cooked products without re-heating.

VIASURE *Salmonella, Campylobacter & Shigella/EIEC* Real Time PCR Detection Kit is designed for the diagnosis of the *Salmonella, Campylobacter* and/or *Shigella/EIEC* in human stool samples. After DNA isolation, the identification of *Salmonella, Campylobacter* and/or *Shigella/EIEC* is performed by the amplification of a conserved region of the *invA* gene for *Salmonella*, 16S rRNA gene for *Campylobacter* and *ipaH* gene for *Shigella/EIEC*, 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



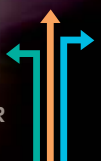
High sensibility, specificity and reproducibility



Validated according to ISO 13485 and CE marked



THE REAL ONE STEP qPCR



Analytical sensitivity

VIASURE Salmonella, Campylobacter & Shigella/EIEC Real Time PCR Detection Kit has a detection limit of ≥ 10 DNA copies per reaction for *Salmonella*, *Campylobacter* & *Shigella/EIEC* (figures 1, 2 and 3).

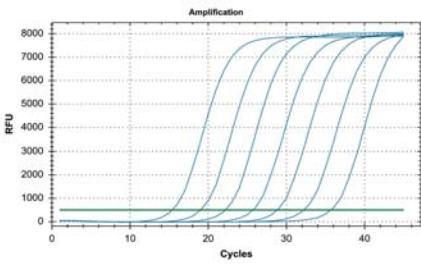


Figure 1. Dilution series of *Salmonella* (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (FAM channel).

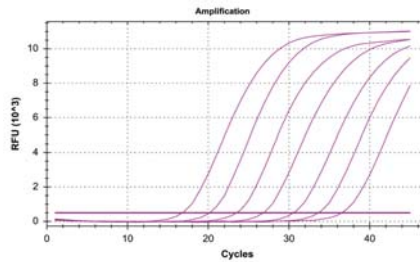


Figure 2. Dilution series of *Campylobacter* (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Cy5 channel).

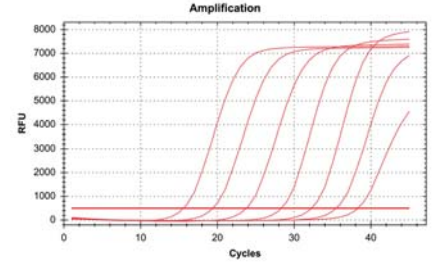


Figure 3. Dilution series of *Shigella/EIEC* (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (ROX channel).

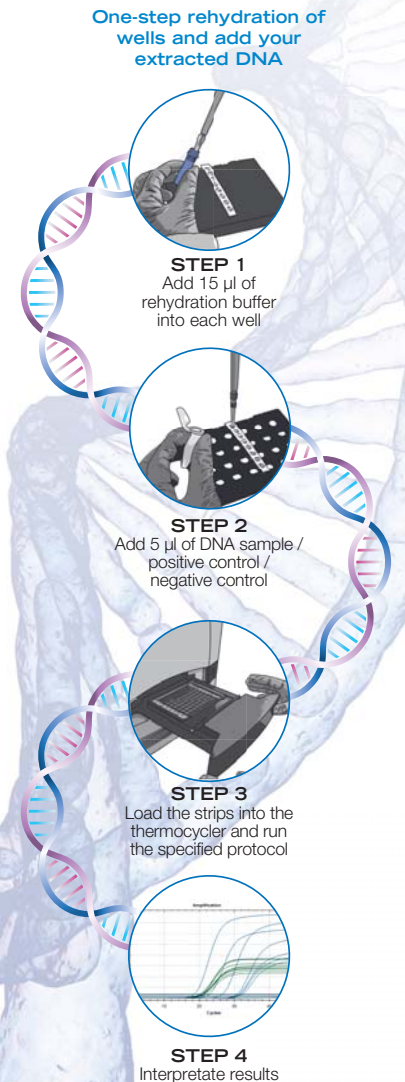
Components

Reagent/Material	Description	Quantity
<i>Salmonella, Campylobacter & Shigella/EIEC</i> 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
<i>Salmonella, Campylobacter & Shigella/EIEC</i> 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
<i>Salmonella, Campylobacter & Shigella/EIEC</i> 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-SCS106L	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-SCS106H	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-SCS112L	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-SCS112H	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-SCS113L	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 96-well plate, low profile
VS-SCS113H	VIASURE <i>Salmonella, Campylobacter & Shigella/EIEC</i> Real Time PCR Detection Kit 96-well plate, high profile

Work Flow



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