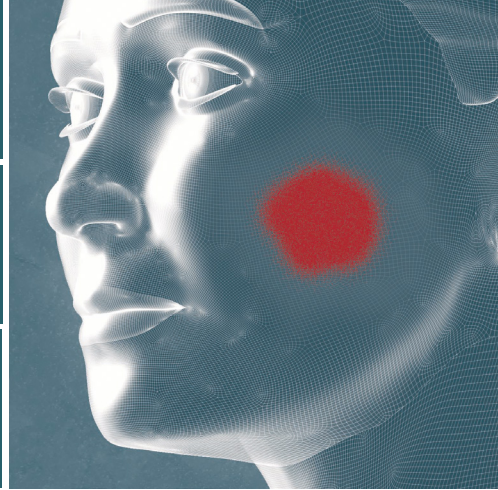
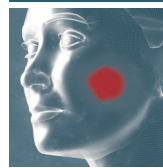
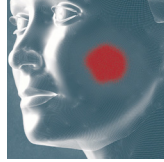


# Fast Track

## DIAGNOSTICS

A Siemens Healthineers Company

## Syndromic real-time PCR multiplexing kits



Accurate

Lyophilised

Sensitive

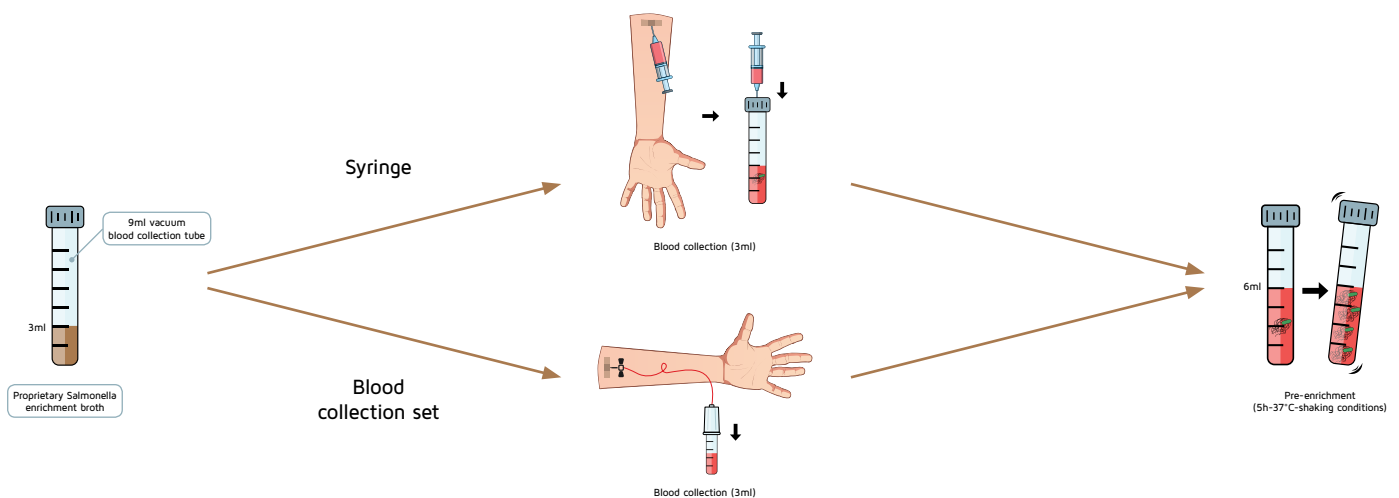
## FTIyo Enteric fever kit

Complete solution for the detection of: *Salmonella* spp., *Salmonella enterica* serovar Typhi, *Salmonella enterica* serovar Paratyphi A and internal control.

### Enteric fever overview

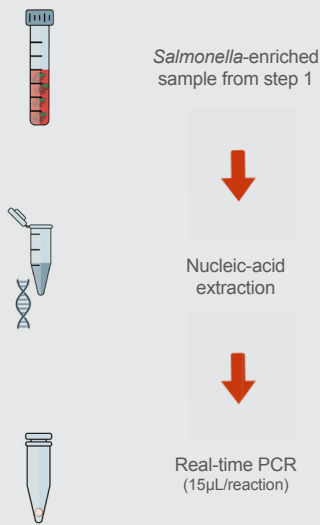
Enteric fever, also known as typhoid fever, caused by *Salmonella*, remains a significant public health problem, predominantly in children in developing countries. Typhoid fever affects more than 20 million people per year and is associated with 300,000 deaths. These high rates are due to inappropriate treatment strategy but also to the lack of fast, reliable and inexpensive diagnostic assays. Diagnosis of typhoid fever remains also a challenge because low bacterial load can be found even in significant illness and the volume of blood that can be collected from children is limited.

### Step 1: Sample collection and enrichment solution



» FTD developed a unique solution for enrichment of *Salmonella* from blood samples. The product is a vacuum blood collection tube containing a proprietary *Salmonella* enrichment broth (FTD VACulture Salmonella). 3 mL of patient blood are directly drawn into the blood collection tube which is then incubated for 5 hours at 37°C under shaking conditions.

## Workflow



After the sample enrichment step, nucleic-acid material is extracted and analysed using the FTIyo Enteric fever real-time PCR kit.

- Lyophilised** >> all the reagents required included in a single patient sample tube, you just need to add nucleic-acid extract.
- Quality** >> CE-IVD (*in vitro* diagnostic), external quality assessments and external and internal clinical studies.
- Accuracy** >> high sensitivity, high specificity - limit of detection 5,000 cop/mL.
- Precision** >> consistent results with excellent repeatability and reproducibility.
- Fast** >> one-step syndromic real-time PCR multiplexing kit.
- Robustness** >> forget about the cold chain - no degradation due to freeze/thaw.
- Expert support** >> scientist-to-scientist technical support.
- Cost-effective** >> competitive prices, value for money offer.
- Shelf life** >> 12 months from manufacture.
- Sample type** >> whole blood.

## Competitor comparison

In addition of being a multiplex real-time PCR assay detecting simultaneously *Salmonella* spp., *Salmonella enterica* serovar Typhi and *Salmonella enterica* serovar Paratyphi A, the FTIyo Enteric fever kit showed better performances than the kits from competitors:

Pathogen	Concentration	Fast Track Diagnostics		Competitor 1		Competitor 2	
		Ratio positive	Mean Ct* Value	Ratio positive	Mean Ct* value	Ratio positive	Mean Ct* value
<i>S. enterica</i> serovar Typhimurium	1:1	3/3	30.8	N/A**	N/A**	N/A**	N/A**
	1:5	3/3	34.0	N/A**	N/A**	N/A**	N/A**
	1:25	2/3	39.1	N/A**	N/A**	N/A**	N/A**
<i>S. enterica</i> serovar Typhi	1:1	3/3	31.5	3/3	37.0	3/3	33.6
	1:5	3/3	33.2	2/3	38.0	3/3	35.5
	1:25	2/3	35.8	1/3	38.6	2/3	37.0
<i>S. enterica</i> serovar Paratyphi	1:1	3/3	30.2	3/3	34.9	N/A**	N/A**
	1:5	3/3	35.9	2/3	36.8	N/A**	N/A**
	1:25	2/3	36.1	1/3	37.7	N/A**	N/A**

\*Ct: Cycle threshold  
 \*\*N/A: Non Applicable as the competitor kit does not detect the pathogen

## Quote from publications

“...This novel rapid and sensitive assay might become a valuable new tool for laboratory confirmation of enteric fever and for the implementation in enteric fever surveillance programs in developing countries.”

Telles, JN. et al., ECCMID poster 2016, “Clinical assessment of a rapid molecular assay to detect *Salmonella enterica* Typhi and Paratyphi A in blood from typhoid suspected patients in Bangladesh”

Fast Track Diagnostics Ltd., Seaview, No. 2, Qui-Si-Sana Seafront, Sliema, SLM 3110, Malta  
 Sales enquiries: T +356 2765 4302 • F +356 2765 4303 • E order@fast-trackdiagnostics.com  
 Technical enquiries: T +352 281 098-1 • E support@fast-trackdiagnostics.com  
 Administrative and finance enquiries: T +356 2765 4302 • F +356 2765 4303 • E info@fast-trackdiagnostics.com  
 Legal Manufacturer - Fast Track Diagnostics Luxembourg SARL: 29, rue Henri Koch, L-4354 Esch-sur-Alzette