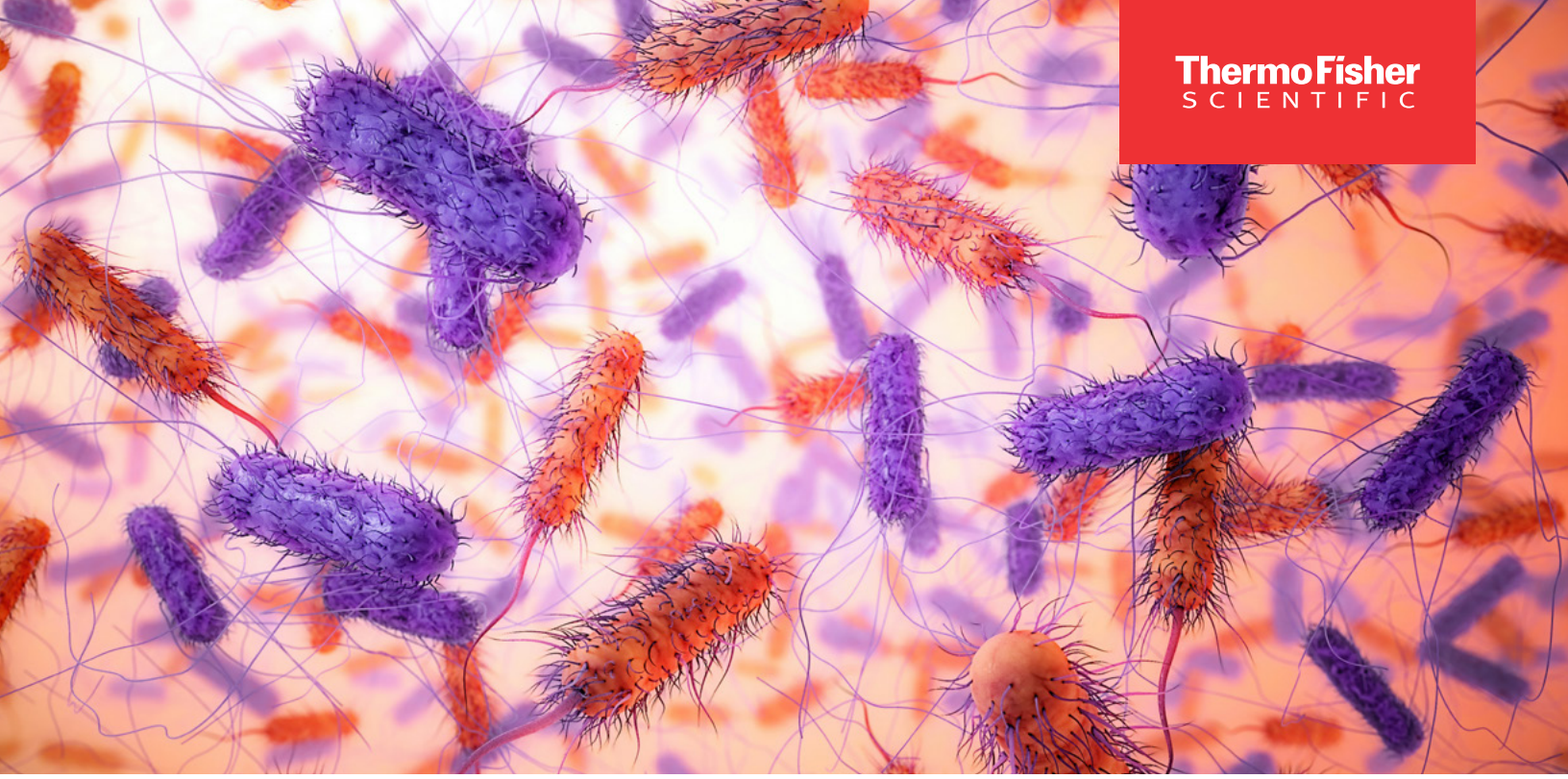

Comprehensive enteric pathogen detection for research

Get more answers with our expanded real-time PCR research solutions

Infectious gastroenteritis is caused by bacterial, viral, or parasitic infection and can lead to inflammation of the lining of the stomach and small and large intestines. Detection of these pathogens is critical for research and can be challenging due to limitations with traditional microscopy and culture-based methods that have laborious workflows and subjective interpretation, are prone to contamination, and can miss bacterial and parasitic pathogens owing to fastidious growth in culture. While molecular testing is more sensitive, most commercially available molecular tests for research are expensive, primarily focus on either viruses or bacteria, and lack the flexibility to include specific targets that are relevant.

Our new real-time PCR solution for enteric pathogens is a sensitive, expanded research test panel that covers bacterial, viral, and parasitic targets associated with infectious gastroenteritis. The Applied Biosystems™ TrueMark™ Enteric Pathogen Panel on Applied Biosystems™ TaqMan™ OpenArray™ plates and TaqMan™ array cards are research products that leverage the power of the Applied Biosystems™ QuantStudio™ 7 and 12K Flex Real-Time PCR systems to form a complete, end-to-end solution for gastrointestinal pathogen testing.

Features of the panel:

- **Extensive coverage—**with 26 qualified pathogen assays, including bacterial, viral, and parasitic targets
- **Off-the-shelf or customizable options—**verified for TaqMan array cards and TaqMan OpenArray plates to meet your throughput needs
- **Cost-effective workflow—**low cost per sample with expanded pathogen coverage
- **Multiple sample input types—**including stool in Thermo Scientific™ Cary-Blair transport medium, rectal swab, and raw stool

applied biosystems

Our enteric pathogen solution has been optimized for 384-well microfluidic TaqMan array cards and TaqMan OpenArray plates.

Enteric pathogen targets:

Pathogen type	Target pathogen
Bacterial	*Campylobacter jejuni*, *coli*, and *upsaliensis**
	*Clostridium difficile**
	*Plesiomonas shigelloides**
	*Salmonella spp.**
	*Yesinia enterocolitica**
	Vibrio parahaemolyticus, *vulnificus*, and *cholerae**
	Enteroaggregative *E. coli* (EAEC)*
	Enteropathogenic *E. coli* (EPEC)*
	Enterotoxigenic *E. coli* (ETEC)*
	Shiga-like, toxin-producing *E. coli* (STEC) Stx1/Stx2*
	Enteroinvasive *E. coli* (EIEC)/Shigella*
	Listeria monocytogenes
	E. coli O157*
Viral	Adenovirus F40/41*
	Astrovirus*
	Norovirus GI*
	Norovirus GII*
	Rotavirus A*
	Rotavirus B
	Rotavirus C
	Sapovirus (I, II, IV)*
	Sapovirus G.V (V)*
Parasitic	*Cryptosporidium**
	Cyclospora cayetanensis
	*Entamoeba histolytica**
	*Giardia lamblia**

All are included with TaqMan OpenArray plate.
* Indicates those included with array card.

TaqMan array card format for enteric pathogen detection:

Feature	Specifications
No. of wells	384
No. of targets	22 enteric plus 2 controls (Xeno and *Bacillus atrophaeus*)
No. of samples	8
Master mix volume	400 µL per array card (384 reactions)
Reaction volume	1 µL
Samples/day	Up to 64
Compatible instruments	QuantStudio 7, 7 Pro, and 12K Flex Real-Time PCR systems with array card block
Time-to-results	4 hours

TaqMan OpenArray plate format for enteric pathogen detection:

Feature	Specifications
No. of wells	2,688
No. of targets	26 enteric plus 2 controls (Xeno and *Bacillus atrophaeus*)
No. of samples	Up to 48 samples per plate (spotted in duplicate)
Master mix volume	120 µL per OpenArray plate
Reaction volume	33 nL
Samples/day	Up to 576
Compatible instruments	QuantStudio 12K Flex Real-Time PCR System with OpenArray block
Time-to-results	5 hours

Ordering information

Product	Quantity	Cat. No.
TrueMark Enteric Pathogen Expanded Panel, Array Card	1 card	4398986
TrueMark Enteric Pathogen Expanded Panel, OpenArray Plate	10 plates	4470201
TrueMark Enteric Pathogen Amplification Control	4 x 250 µL at 1 x 10^5 copies/µL	A50375
TrueMark Enteric Pathogen Analytical Validation Control	50 µL at 5 x 10^7 copies/µL	A50379
TrueMark Enteric Pathogen PreAmp Primers (with *B. atrophaeus*), Array Card	1,000 µL at 4X	4441856
TrueMark Enteric Pathogen PreAmp Primers (with *B. atrophaeus*), OpenArray Plate	1,000 µL at 4X	4485255

Find out more at **thermofisher.com/pathogendetection**