

Lab readiness checklist

TaqPath Enteric Bacterial Select Panel, Rev A

The Applied Biosystems™ TaqPath™ Enteric Bacterial Select Assay Multiplex is a real-time polymerase chain reaction (PCR) assay. It uses extracted nucleic acid from stool specimens. The TaqPath Enteric Bacterial Select Assay Multiplex contains primers and probe sets specific to the following targets:

- *Salmonella* spp.
- *Shigella* spp./Enteroinvasive *Escherichia coli* (EIEC)*
- *Campylobacter jejuni* (*C. jejuni*), *Campylobacter coli* (*C. coli*), and *Campylobacter upsaliensis* (*C. upsaliensis*)
- *Bacillus atrophaeus* (used as a process control)

Applied Biosystems™ TaqPath™ Enteric Bacterial Select Panel (Cat. No. A54714)

For use with:

- Applied Biosystems™ QuantStudio™ 5 Real-Time PCR System, 96-well, 0.2 mL block
- Applied Biosystems™ QuantStudio™ 5 Dx Real-Time PCR System, 96-well, 0.2 mL block

This document lists all instruments, consumables, and reagents recommended and required for installing the instrument, training, and running an experiment for the detection and differentiation of *Salmonella* spp., *Shigella* spp./EIEC, *C. jejuni*, *C. coli*, and *C. upsaliensis*. Please review this list carefully to ensure all necessary materials are available before installation and training dates. Missing materials can delay your setup process. Intended uses of the products mentioned vary. For specific intended use statements, please refer to the product labels.

Ordering information

Product	Supplier	Storage	Cat. No.
The TaqPath Enteric Bacterial Select Panel includes: ¹	Thermo Fisher Scientific	-30°C to -10°C	A54714
<ul style="list-style-type: none"> • TaqPath Enteric Bacterial Select Assay Multiplex • TaqPath Enteric Bacterial Select Process Control • TaqPath Enteric Bacterial Select Positive Control • TaqPath 1-Step Enteric Master Mix (No ROX) 			

1. The individual components cannot be ordered separately.

**Shigella* spp. / Enteroinvasive *E. coli* (EIEC) are undifferentiated.

Nucleic acid extraction

Materials not supplied

The sample preparation step can be performed with a nucleic acid extraction method of choice. Customers are responsible to perform the validation procedures according to standard operational procedures and regional regulatory guidelines. The nucleic acid extraction procedure during the generation of performance data for the assay made use of the materials below.

Ordering information

Product	Supplier	Storage	Cat. No.
MagMAX Microbiome Bead Plate or Tubes	Thermo Fisher Scientific	RT	A42331 or A42358
Fisher BioReagents Ethanol, Absolute (200 Proof), Molecular Biology Grade, or equivalent	Fisher Scientific	RT	BP2818100, BP2818500, BP28184
Nuclease-Free Water (not DEPC-Treated)	Various	RT	Various
KingFisher Flex Purification System, with 96 Deep-Well Head and Deep-Well Head	Thermo Fisher Scientific	RT	5400630
KingFisher Flex 96 Deep-Well Heating Block (if currently using standard block)	Thermo Fisher Scientific	RT	24075430
KingFisher Plastics for 96 deep-well format	Thermo Fisher Scientific	RT	95040450
KingFisher Flex 96 Deep-Well Tip Combs	Thermo Fisher Scientific	RT	97002534
Kingfisher Plastics for 96 standard and PCR formats	Thermo Fisher Scientific	RT	97002540
MicroAmp Clear Adhesive Film	Thermo Fisher Scientific	RT	4306311

Product	Supplier	Recommend product	Cat. No.
Bead-beating instrument for 96-well plates	Omni International	Bead Ruptor 96 (100–120 volt)	27-0001
	Omni International	Bead Ruptor 96 (220–240 volt)	27-0002
	Thermo Fisher Scientific	Bead Mill 24 Homogenizer	15-340-163
Reagent dispenser (optional)	Thermo Fisher Scientific	Multidrop Combi Reagent Dispenser	5840300
Conical tubes, 15 mL	Thermo Fisher Scientific	Conical Tubes, 15 mL (racked) (500 tubes)	AM12500
Conical tubes, 50 mL	Thermo Fisher Scientific	Conical Tubes, 50 mL (racked) (200 tubes)	AM12501
Biosafety cabinet	Thermo Fisher Scientific	Herasafe 2030i Class 2 A2 Biological Safety Cabinet	51032334
		1300 Series Class II, Type A2 Biological Safety Cabinet Package	1336

Real-time PCR

Ordering information

Product	Supplier	Cat. No.
One of the following:		
QuantStudio 5 Real-Time PCR System, 96-well, 0.2 mL block (used with QuantStudio Design and Analysis Desktop Software v1.5.1)	Thermo Fisher Scientific	A28569 (with laptop computer)
		A28574 (with desktop computer)
		A28139 (instrument only)
QuantStudio 5 Dx Real-Time PCR System, 96-well, 0.2 mL block (used with QuantStudio 5 Dx IVD Software v1.0.2)	Thermo Fisher Scientific	A32005 (with laptop computer)
		A32006 (with tower computer)

Data analysis and reporting

Ordering information

Product	Supplier	Service contact
Pathogen Interpretive Software CE-IVD Edition v1.1 with the SAE Administrator Console Dx v1.0.0 and the appropriate assay panel for your instrument	Thermo Fisher Scientific	thermofisher.com/contactus
EntBact-CE-IVD_QS5-9602_1.0.0	Thermo Fisher Scientific	thermofisher.com/contactus
EntBact-CE-IVD_QS5Dx-9602_1.0.0	Thermo Fisher Scientific	thermofisher.com/contactus

The software and assay panel can be installed on a customer-provided computer with the following minimum computer system specifications:

- **Operating system**—Windows 10 (64 bit), with language set to English
- **Processor**—Pentium 4 or higher
- **Memory**—8 GB RAM minimum
- **Hard drive**—10 GB minimum free space
- **Monitor**—1280 × 1024 resolution or higher

Various

Various

Note for Pathogen Interpretive Software CE-IVD Edition v1.1: If Pathogen Interpretive Software CE-IVD Edition v1.1, SAE Administrator Console Dx v1.0.0, and Pathogen Interpretive Software CE-IVD Edition SAE Profile 1.0.0 are already installed on your computer for use with another product, you do not need to install them again. The software can be used with assay panels from multiple kits.

Required materials and equipment not supplied

General laboratory equipment and consumables

Ordering information

Product	Supplier	Storage	Cat. No.
Laboratory freezers, -30°C to -10°C	Various		Various
Centrifuge, with a rotor that accommodates standard and deep-well microplates	Various		Various
Microcentrifuge	Various		Various
Laboratory vortexer with variable speed control for 500 rpm–3,000 rpm and timer including both plate adaptor and pop-off cup	Various		Various
Single- and multichannel adjustable pipettors (1.0 µL to 1.0 mL)	Various		Various
Cold block (96-well) or ice	Various		Various
MicroAmp Optical 96-Well Reaction Plate with Barcode, 0.2 mL	Thermo Fisher Scientific	RT	4306737, 4326659
MicroAmp Optical 96-Well Reaction Plate, 0.2 mL	Thermo Fisher Scientific	RT	N8010560, 4316813
MicroAmp Optical Adhesive Film	Thermo Fisher Scientific	RT	4311971, 4360954
MicroAmp Adhesive Film Applicator	Thermo Fisher Scientific	RT	4333183
MicroAmp Optical Film Compression Pad	Thermo Fisher Scientific	RT	4312639
Nonstick, DNase-free microcentrifuge tubes (1.5 mL and 2.0 mL)	Thermo Fisher Scientific	RT	thermofisher.com/plastics
Sterile aerosol barrier (filtered) pipette tips	Thermo Fisher Scientific	RT	thermofisher.com/pipettetips
Nuclease-Free Water (not DEPC-Treated)	Various		Various
Low TE Buffer	Thermo Fisher Scientific	RT	12090015
TE Buffer, 1X Solution pH 8.0, Low EDTA	Thermo Fisher Scientific	RT	J75793.AP
PBS (1X), pH 7.4	Thermo Fisher Scientific	15°C to 30°C	10010023
Microcentrifuge tube rack for 1.5 mL or 2.0 mL tubes	Thermo Fisher Scientific	RT	8760, 8770-11, 8780

Optional training

Cat. No. TRN00406 or TRN00407

Expand your knowledge of the TaqPath Enteric Bacterial Select Panel workflow with an interactive training course conducted in your place of work. The training can cover:

- Review of Intended Use and certification
- Overview of workflow and best practices

- Preliminary quality control and software review
- Dry-lab demonstration and wet-lab practice using control materials

Contact your sales representative for more information and other training options.

 Find out more at thermofisher.com/taqpathentericselect

applied biosystems

Intended use of the products mentioned vary. For specific intended use statements, please refer to the product label. © 2022 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. Windows is a trademark of Microsoft Corporation. Pentium is a registered trademark of Intel Corporation. Bead Ruptor is a trademark of PerkinElmer, Inc. **COL26547 0822**