



Enteric Pathogens

TandemPlex®

TandemPlex® panels feature multiplex tandem PCR, or MT-PCR, a multiplexed molecular method that provides the added capability to detect viruses, bacteria, and parasites in one go, bringing great benefits for differential diagnosis.

Multiplexed molecular methods are becoming the gold standard for the detection of enteric pathogens due to their superior sensitivity, rapid turnaround time, simplicity, and ability to identify multiple pathogens, some of which are slow growing or difficult to culture.

Enteric Pathogens TandemPlex® Panels

Bacteria, Parasites, & Worms

Selection of the most common parasites.

Parasites 8-well REF 25021



Blastocystis hominis type 1	Dientamoeba fragilis
Blastocystis hominis type 3	Entamoeba histolytica (not dispar)
Cryptosporidium (parvum and hominis)	Giardia duodenalis
Cyclospora cayetanensis	Giardia lamblia

Worms & Parasites 16-well (coming soon) REF 25044



Ascaris lumbricoides	Entamoeba histolytica
Ancylostoma spp	Giardia duodenalis
Blastocystis hominis	Hymenolepis nana
Blastocystis hominis type 1,3	Necator americanus
Cryptosporidium (parvum and hominis)	Schistosoma mansoni
Cyclospora cayetanensis	Strongyloides stercoralis
Dientamoeba fragilis	Trichuris trichiura
Enterobius vermicularis	Taenia saginata
	Taenia solium

Faecal Bacteria and Parasites 12-well REF 25041



Bacteria	Parasites
<i>Campylobacter jejuni</i>	Cryptosporidium
<i>Campylobacter coli</i>	Entamoeba histolytica
<i>Clostridium difficile</i> toxin A	Giardia duodenalis
<i>Clostridium difficile</i> toxin B	
<i>Escherichia coli</i> O157	
Shiga toxin 1	
Shiga toxin 2	
<i>Salmonella</i> spp.	
<i>Shigella</i> spp.	
<i>Yersinia enterocolitica</i>	
<i>Yersinia pseudotuberculosis</i>	

STEC Typing 16-well REF 26131 (RUO)



EPEC	<i>Escherichia coli</i> O128
<i>Escherichia coli</i>	<i>Escherichia coli</i> O145
<i>Escherichia coli</i> O26	<i>Escherichia coli</i> O157
<i>Escherichia coli</i> O45	<i>Escherichia coli</i> saa
<i>Escherichia coli</i> O103	<i>Escherichia coli</i> hylA
<i>Escherichia coli</i> O111	Shiga toxin 1
<i>Escherichia coli</i> O113	Shiga toxin 2
<i>Escherichia coli</i> O121	

Enteric Viruses

6 groups of enteric viruses spanning 4 families, including most common causes of acute gastroenteritis, and highly contagious rotavirus.

Enteric Viruses 8-well REF 25037



Adenovirus group F and G	Norovirus genogroup I
Astrovirus	Norovirus genogroup II
Enterovirus	Rotavirus A
	Sapovirus

Common

Single products that cover several of the most common bacterial pathogens and shiga toxins, with at least 3 families of enteric viruses, and obligatory pathogenic parasites.

Faecal Pathogens A 16-well REF 25031



Bacteria	Parasites	Viruses
<i>Aeromonas hydrophila</i>	Blastocystis hominis	Adenovirus group F and G
<i>Campylobacter jejuni</i>	Cryptosporidium (parvum and hominis)	Norovirus genogroup I
<i>Campylobacter coli</i>	Dientamoeba fragilis	Norovirus genogroup II
<i>Clostridium difficile</i> toxin B	Entamoeba histolytica (not dispar)	Rotavirus A
<i>Salmonella</i> spp.	Giardia duodenalis	
<i>Shigella</i> spp.		
<i>Yersinia</i> spp.		

Faecal Pathogens M 16-well REF 25039



Bacteria	Parasites	Viruses
<i>Aeromonas</i> spp.	Cryptosporidium (parvum and hominis)	Adenovirus group F and G
<i>Campylobacter jejuni</i>	Entamoeba histolytica (not dispar)	Astrovirus
<i>Campylobacter coli</i>	Giardia duodenalis	Norovirus genogroup I
<i>Clostridium difficile</i> toxin A		Norovirus genogroup II
<i>Clostridium difficile</i> toxin B		Rotavirus A
<i>Salmonella</i> spp.		Sapovirus
<i>Escherichia coli</i> Shiga toxin 1		
<i>Escherichia coli</i> Shiga toxin 2		
<i>Shigella</i> spp.		
<i>Yersinia pseudotuberculosis</i>		
<i>Yersinia enterocolitica</i>		

Sample results

Presence of a target gene is represented by the fluorescence detected during the MT-PCR process. These results (Figure 1) are also presented as MELT curves and gene targets detected in the sample are automatically called for clear diagnosis.

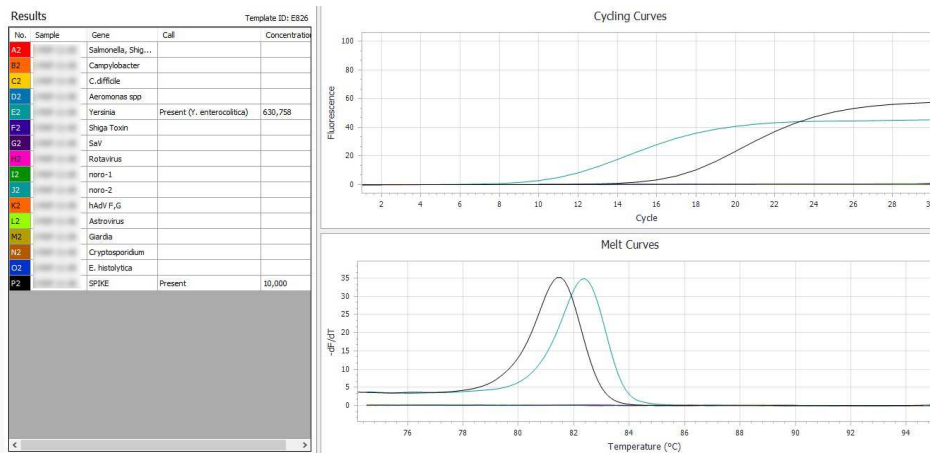


Figure 1: Sample results for Faecal Pathogens M 16-well panel (Ref 25039)

Automation

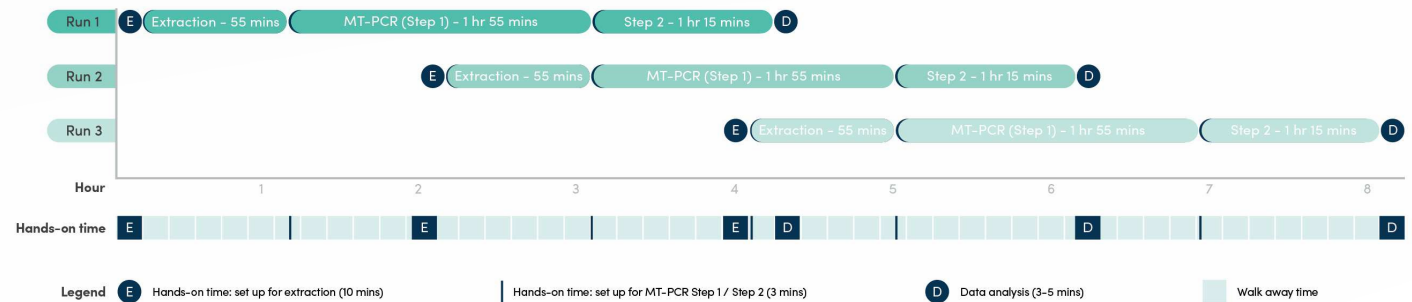
Diagnostic testing using TandemPlex® panels is effortless with automation solutions for any workflow, ranging from low and versatile throughput to high throughput and screening applications.

Highplex Alliance™

Low-medium throughput

MT-Prep™ 24 sample purification with Highplex MT-PCR processing

- Sample to results from up to 24 samples¹ in 4 hrs 30 mins
Extraction: 35 – 55 mins² | MT-PCR: 3 hrs 30 mins
- Quick and easy setup in less than 2 mins
- Ready-to-use reagents and key plastic consumables
- Small footprint – requires less than 2m of bench space
- UV deck sterilisation to prevent cross contamination
- Automatic results calling
- LIMS compatible



¹ 8-well, 12-well and 16-well TandemPlex® panels can run up to 24 samples; 24-well panels up to 16 samples.

² using MT-Prep™ Viral/Pathogen Nucleic Acids Extraction Kit B. 35-minute rapid protocol, 55-minute standard protocol for up to 24 samples.

HP 24 TandemPlex® panel compatible with Highplex instrument

8 8-well TandemPlex® panel

12 12-well TandemPlex® panel

16 16-well TandemPlex® panel

24 24-well TandemPlex® panel

Ordering information

Each TandemPlex® panel requires the following to run:

1. Step 1 Tubes (e.g. 80617S)
2. Step 2 Plates (e.g. 80617P)
3. Reagent Cassette for Highplex or Reagent Reservoir for Ultrplex instruments
4. Synthetic positive controls



[Learn more](#)

Key reagents

xxxxxS	Step 1 Tubes for the relevant panel
xxxxxP	Step 2 Plates for the relevant panel
40231	Low DNA Reagent Cassette
40241	Demi DNA Reagent Cassette
40331	Low RNA Reagent Cassette
40341	Demi RNA Reagent Cassette
91031	Synthetic Positive Controls for Faecal Panels

Highplex Alliance™

93100	MT-Prep™ 24
90501	Highplex

Demi Reagent Cassettes are for 8-well panels; Low for 12-well, 16-well, and 24-well.

Ordering information on consumables for the Highplex Alliance™ is available from your local AusDiagnostics representative.

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