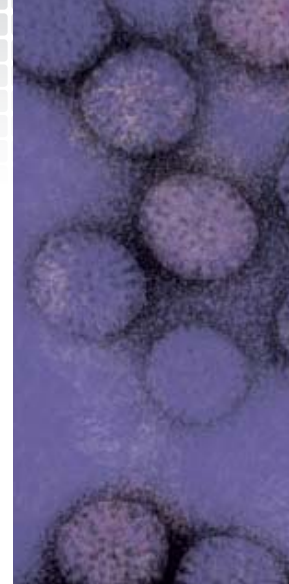


Research Use Only

Not For Use in Diagnostic Procedures in the U.S.A.

Diarrhea Detection



Diarrhea
Detection

PRODUCTS FOR Infectious Diarrhea Detection

- 1 4 Diarrhea Viruses
- 2 9 Diarrhea Bacteria & 1 Bacterial Toxin



Viral and Bacterial Diarrhea

▶ Super Multiplex PCR

Simultaneous detection of multiple pathogens by just one-time PCR

▶ Seeplex® PCR with High Specificity and Sensitivity

▶ Low Cost and Fast Result

▶ Applicable for Automatic System

Automatic sample preparation, detection and analysis

Rapid and easy interpretation

● Human Infectious Diarrhea

- Second leading causes of all death worldwide
- Most common cause of morbidity and mortality in children worldwide

● Etiology of Human Infectious Diarrhea

- Virus : 70-80 % of infectious diarrhea in developed countries
- Bacteria : 10-20% of infectious diarrhea but responsible for most cases of severe diarrhea

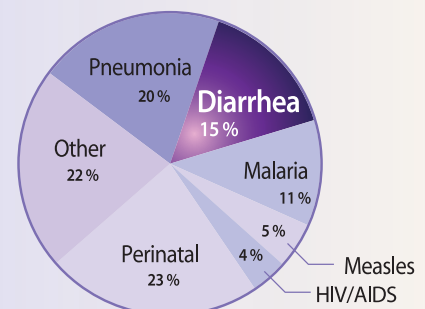
● Viral Diarrhea

- Most likely cause of infectious diarrhea
- Rotavirus and Norovirus are most common
- Symptoms usually include low grade fever, nausea and vomiting, abdominal cramps, and watery diarrhea lasting up to 1 week.

● Bacterial Diarrhea

- Can affect all age groups
- Fecal-oral transmission, often through contaminated food
- Typical symptoms include bloody diarrhea, severe cramping, and malaise.

What's Killing Children?
Diarrhea - Policy, Sanitation, and Handwashing



- Diarrhea is the second most common cause of death for children under the age of five. Globally, about 2 million child deaths (children under five) occur every year. (UNICEF)

<http://machete.gummyprint.com/whats-killing-children-diarrhea-policy-sanitation-and-handwashing/>

Seeplex® Diarrhea ACE Detection



Product	Cat. No.	Size	Specimen
Diarrhea-V ACE Detection	DR6411Y	50 rxns	Stool
Diarrhea-B1 ACE Detection	DR6501Y	50 rxns	Stool
Diarrhea-B2 ACE Detection	DR6502Y	50 rxns	Stool

Pathogen List of Seeplex® Diarrhea ACE Detection

Virus panel
[4 RNA Viruses]

- Rotavirus
- Norovirus G I
- Norovirus G II
- Enteric adenovirus
- Astrovirus

Bacteria panel
[Panel B1]

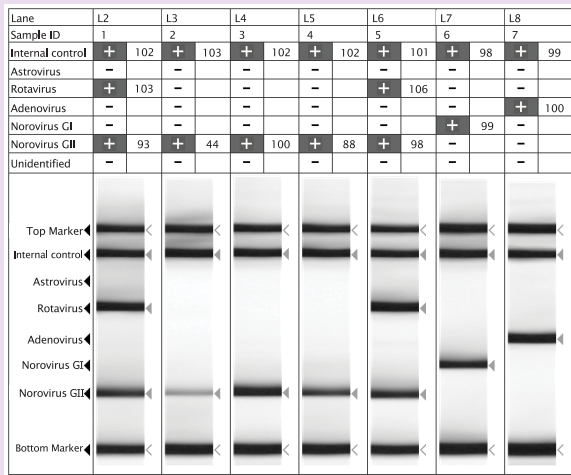
- Salmonella spp.*
- Shigella spp.*
- Campylobacter spp.*
- Vibrio spp.*
- Clostridium difficile* Toxin B

Bacteria panel
[Panel B2]

- Clostridium perfringens*
- Yersinia enterocolitica*
- Aeromonas spp.*
- E. coli* O157:H7
- Verocytotoxin-producing *E. coli* (VTEC)

Examples of Test Result

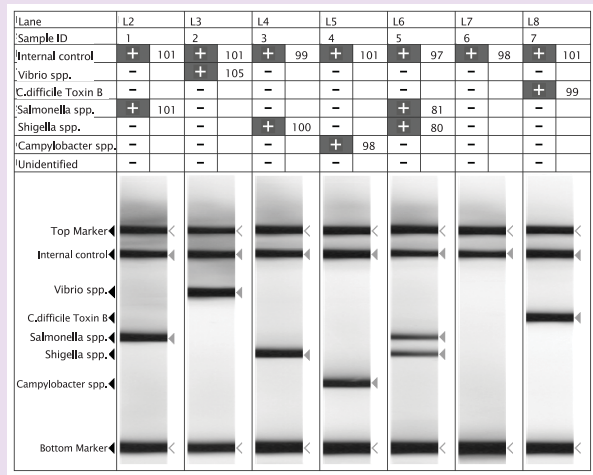
Seeplex® Diarrhea-V ACE Detection



1~7: Clinical samples (ScreenTape® System, Lab901 Limited)

Sample	Result	Sample	Result
1	Rotavirus, Norovirus GII	5	Rotavirus, Norovirus GII
2	Norovirus GII	6	Norovirus GI
3	Norovirus GII	7	Enteric adenovirus
4	Norovirus GII		

Seeplex® Diarrhea-B1 ACE Detection

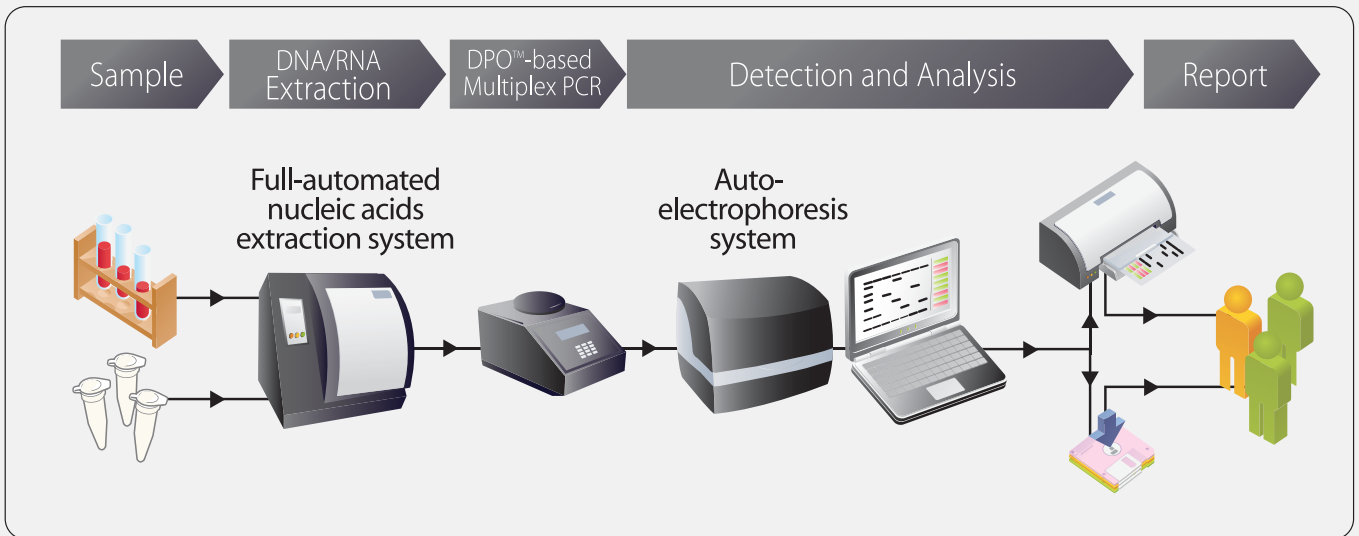


1~7: Clinical samples (ScreenTape® System, Lab901 Limited)

Sample	Result	Sample	Result
1	Salmonella spp.	5	Salmonella spp., Shigella spp.
2	Vibrio spp.	6	Not detected
3	Shigella spp.	7	C. difficile Toxin B
4	Campylobacter spp.		

Rapid and easy interpretation using auto-electrophoresis (ScreenTape® System)

■ Seeplex[®] System for Automatic Detection



■ Seeplex[®] Key Products

Respiratory Pathogen	<ul style="list-style-type: none"> Detection of 12, 6, or 7 Respiratory viruses Detection of 6 Pneumonia bacteria Detection of 13 Respiratory viruses and 5 Pneumonia bacteria
HPV	<ul style="list-style-type: none"> Detection of 18 HPV types (13 high-risk and 5 low-risk HPV Types) Screening for HPVs (16, 18, High-risk, and Low-risk common) Screening for 2 STD pathogens (CT, NG) and HPVs (High-risk, Low-risk common) Genotyping of 6 HPV types (Pre-screening for HPV vaccination)
STD	<ul style="list-style-type: none"> Detection of 7, 6, or 4 STD pathogens Screening for 2 STD pathogens (CT, NG) and HPVs (High-risk, Low-risk common)
Drug Resistance	<ul style="list-style-type: none"> Detection of Vancomycin-resistant Enterococci (van A, van B) Detection of Clarithromycin-resistant <i>H. pylori</i> (A2143G, A2142G) Detection of Lamivudine-resistant HBV (YVDD, YIDD, L528M, YSDD)
SNP	<ul style="list-style-type: none"> MTHFR C677T/A1298C genotyping CYP2C19 genotyping ApoE genotyping
TB	<ul style="list-style-type: none"> MTB and NTM discrimination for culture specimens MTB and <i>M. bovis</i> BCG discrimination for various specimens MTB Detection for various specimens (Nested PCR or Single PCR)



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