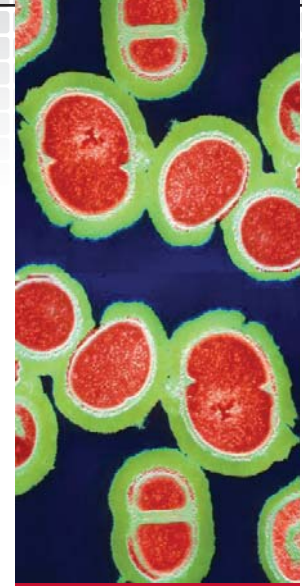




Sepsis Pathogen Detection



Sepsis Pathogen
Detection

DETECTION OF Sepsis Pathogens

Detection of 64 Sepsis-causing Pathogens and
3 Drug Resistance Genes

- 1 Group Screening for 64 Sepsis Pathogens
- 2 Identification of 25 Sepsis Pathogens
- 3 Discrimination of 3 Drug Resistance Genes



New guideline for DNA test on sepsis pathogenes



Seeplex® Sepsis DNA Test



- ▶ One-step screening for 64 sepsis-causing pathogens
- ▶ Discrimination of 3 drug resistance genes
- ▶ Direct detection from 0.4 ml of whole blood
- ▶ 5 hours of turnaround time
- ▶ Low test cost
- ▶ Application on high-throughput auto-detection systems
- ▶ Specimens for diagnosis of infection
Whole blood, periodontal and caries, joint fluid, cerebrospinal fluid, blood cultures, urine, sputum, other body fluids

Sepsis Group Screening Set (Group Screening 1 + Group Screening 2)

Sepsis Group Screening 1 : 3 Gram (+) groups			Sepsis Group Screening 2 : 2 Gram (-) groups and 1 fungi group
Staphylococcus spp. (22)	Streptococcus spp. (24)	Enterococcus spp. (2)	Gram (-) bacteria 1 (5)
<i>S. aureus</i>	<i>S. pneumoniae</i>	<i>Enterococcus faecium</i>	<i>Klebsiella pneumoniae</i>
<i>S. epidermidis</i>	<i>S. agalactiae</i>	<i>Enterococcus faecalis</i>	<i>Klebsiella oxytoca</i>
<i>S. haemolyticus</i>	<i>S. pyogenes</i>		<i>Serratia marcescens</i>
<i>S. pasteurii</i>	<i>S. mitis</i>		<i>Enterobacter cloacae</i>
<i>S. warneri</i>	<i>S. anginosus</i>		<i>Enterobacter aerogenes</i>
<i>S. cohnii subsp. urealyticum</i>	<i>S. gordonii</i>		
<i>S. hominis subsp. hominis</i>	<i>S. intermedius</i>		Gram (-) bacteria 2 (5)
<i>S. caprae</i>	<i>S. oralis</i>		<i>Escherichia coli</i>
<i>S. xylosus</i>	<i>S. parasanguinis</i>		<i>Proteus mirabilis</i>
<i>S. equorum</i>	<i>S. sanguinis</i>		<i>Pseudomonas aeruginosa</i>
<i>S. simulans</i>	<i>S. vestibularis</i>		<i>Acinetobacter baumannii</i>
<i>S. arlettae</i>	<i>S. alactolyticus</i>		<i>Stenotrophomonas maltophilia</i>
<i>S. kloosii</i>	<i>S. criceti</i>		
<i>S. gallinarum</i>	<i>S. downei</i>		Fungi (6)
<i>S. auricularis</i>	<i>S. ferus</i>		<i>Candida albicans</i>
<i>S. chromogenes</i>	<i>S. gallinaceus</i>		<i>Candida tropicalis</i>
<i>S. delphini</i>	<i>S. hyointestinalis</i>		<i>Candida parapsilosis</i>
<i>S. intermedius</i>	<i>S. lutetiensis</i>		<i>Candida glabrata</i>
<i>S. hominis subsp. Novobiosepticus</i>	<i>S. macacae</i>		<i>Candida krusei</i>
<i>S. lugdunensis</i>	<i>S. parauberis</i>		<i>Aspergillus fumigatus</i>
<i>S. capitis subsp. ureplyticus</i>	<i>S. suis</i>		
<i>S. schleiferi subsp. Scheleiferi</i>	<i>S. constellatus subsp. contellatus</i>		
	<i>S. cristatus</i>		
	<i>S. mutans</i>		

Sepsis ID Set (ID1 + ID2 + ID3 + ID4 + ID5)

Sepsis ID 1 : Fungi	Sepsis ID 2 : Gram Positive 1	Sepsis ID 4 : Gram Negative 1
<i>Candida albicans</i>	<i>Staphylococcus aureus</i>	<i>Klebsiella pneumoniae</i>
<i>Candida tropicalis</i>	<i>Staphylococcus epidermidis</i>	<i>Klebsiella oxytoca</i>
<i>Candida parapsilosis</i>	<i>Staphylococcus haemolyticus</i>	<i>Serratia marcescens</i>
<i>Candida glabrata</i>	<i>Staphylococcus spp. Screening (22)*</i>	<i>Enterobacter cloacae</i>
<i>Candida krusei</i>	<i>Enterococcus faecium/faecalis</i>	<i>Enterobacter aerogenes</i>
<i>Aspergillus fumigatus</i>		
	Sepsis ID 3 : Gram Positive 2	Sepsis ID 5 : Gram Negative 2
	<i>Streptococcus pneumoniae</i>	<i>Escherichia coli</i>
	<i>Streptococcus agalactiae</i>	<i>Proteus mirabilis</i>
	<i>Streptococcus pyogenes</i>	<i>Pseudomonas aeruginosa</i>
	<i>Streptococcus mitis</i>	<i>Acinetobacter baumannii</i>
	<i>Streptococcus spp. Screening (24)²</i>	<i>Stenotrophomonas maltophilia</i>

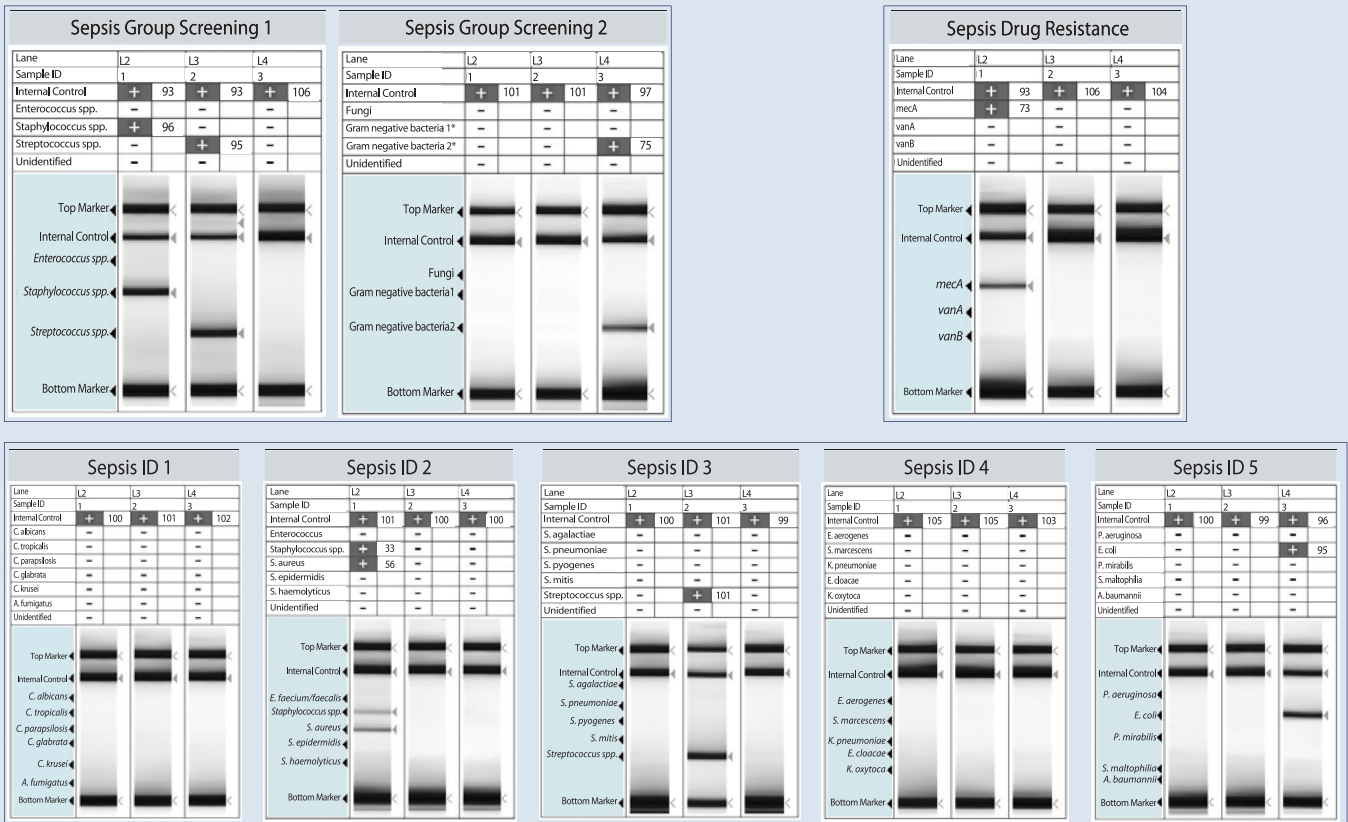
1*. 22 *Staphylococcus spp.* including *Staphylococcus aureus*, *Staphylococcus epidermidis*, and *Staphylococcus haemolyticus*.

2*. 24 *Streptococcus spp.* including *Streptococcus pneumoniae*, *Streptococcus agalactiae*, *Streptococcus pyogenes*, and *Streptococcus mitis*.

Sepsis Drug Resistance (Detection of *vanA*, *vanB*, and *mecA*)

Seeplex® Sepsis DNA Test Results

Figure. Results obtained from testing 3 different patients' samples with Seeplex® Sepsis Group Screening 1~2, Sepsis Drug Resistance, and Sepsis ID 1~5.



1~3 : Clinical samples (ScreenTape® System, LAB901 Limited)

Table. Summary of the results obtained from Seeplex® Sepsis DNA Test on patient 1~3.

	Patient 1	Patient 2	Patient 3
Group Screening	<i>Staphylococcus spp.</i>	<i>Streptococcus spp.</i>	Gram negative bacteria 2
Sepsis ID	<i>S. aureus</i> <i>Staphylococcus spp.</i>	<i>Streptococcus spp.</i>	<i>E. coli</i>
Drug Resistance	<i>mecA</i>	—	—

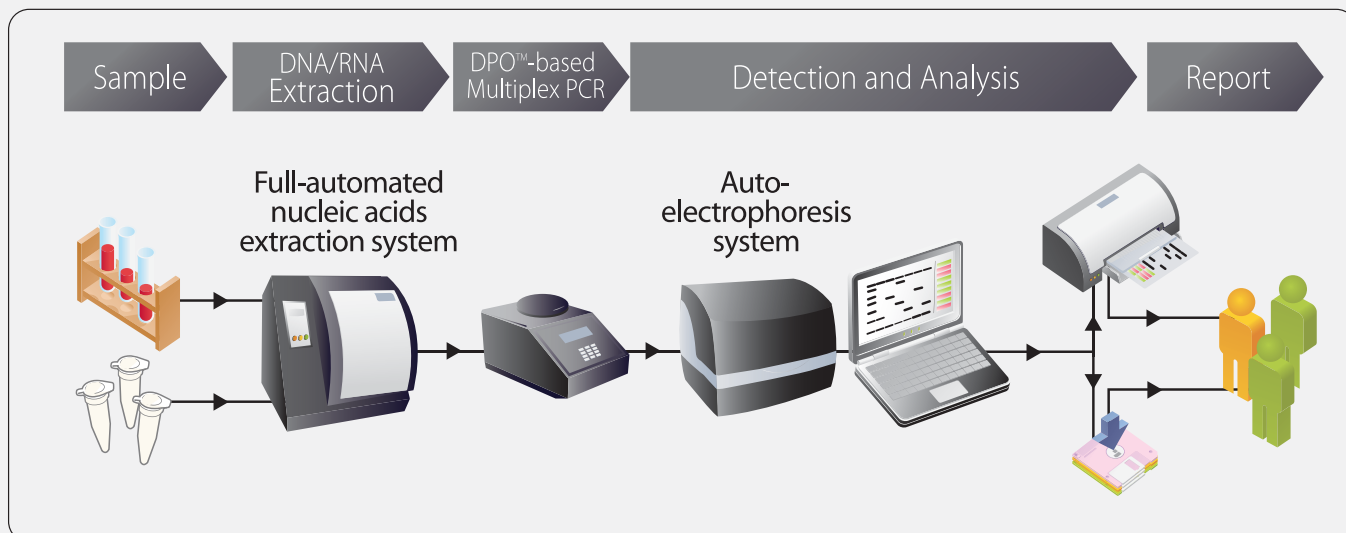
The data from Seeplex® Sepsis Group Screening 1, 2 and Seeplex® Sepsis ID 1~5 show consistent results. Sample ID 1~3 indicate patient 1~3, respectively.

Ordering Information

* Seeplex® sepsis products are available for each individual sale.
* These products should be used for **RUO** (Research Use Only) purposes.

Product	Cat. No.	Size	Use
Sepsis Group Screening Set	SE6550Y	50rxns	Group Screening 1 + Group Screening 2
Sepsis Group Screening 1	SE6551Y	50rxns	Screening 1 : Gram Positive
Sepsis Group Screening 2	SE6552Y	50rxns	Screening 2 : Gram Negative & Fungi
Sepsis ID Set	SE6000Y	50rxns	ID1 + ID2 + ID3 + ID4 + ID5
Sepsis ID1	SE6001Y	50rxns	ID 1 : Fungi
Sepsis ID2	SE6002Y	50rxns	ID 2 : Gram Positive 1
Sepsis ID3	SE6003Y	50rxns	ID 3 : Gram Positive 2
Sepsis ID4	SE6004Y	50rxns	ID 4 : Gram Negative 1
Sepsis ID5	SE6005Y	50rxns	ID 5 : Gram Negative 2
Sepsis Drug Resistance	SE6400Y	50rxns	<i>vanA</i> , <i>vanB</i> , and <i>mecA</i>

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 Pneumonial bacteria Detection of 13 Respiratory viruses and 5 Pneumonial bacteria Screening for the most prevalent Respiratory pathogens
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 9, 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)
Sepsis	<ul style="list-style-type: none"> Group Screening for 64 Sepsis-causing Pathogens Identification of 25 Sepsis-causing Pathogens Discrimination of 3 Drug Resistance Genes



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