

CE-IVD Marked

 Allplex™

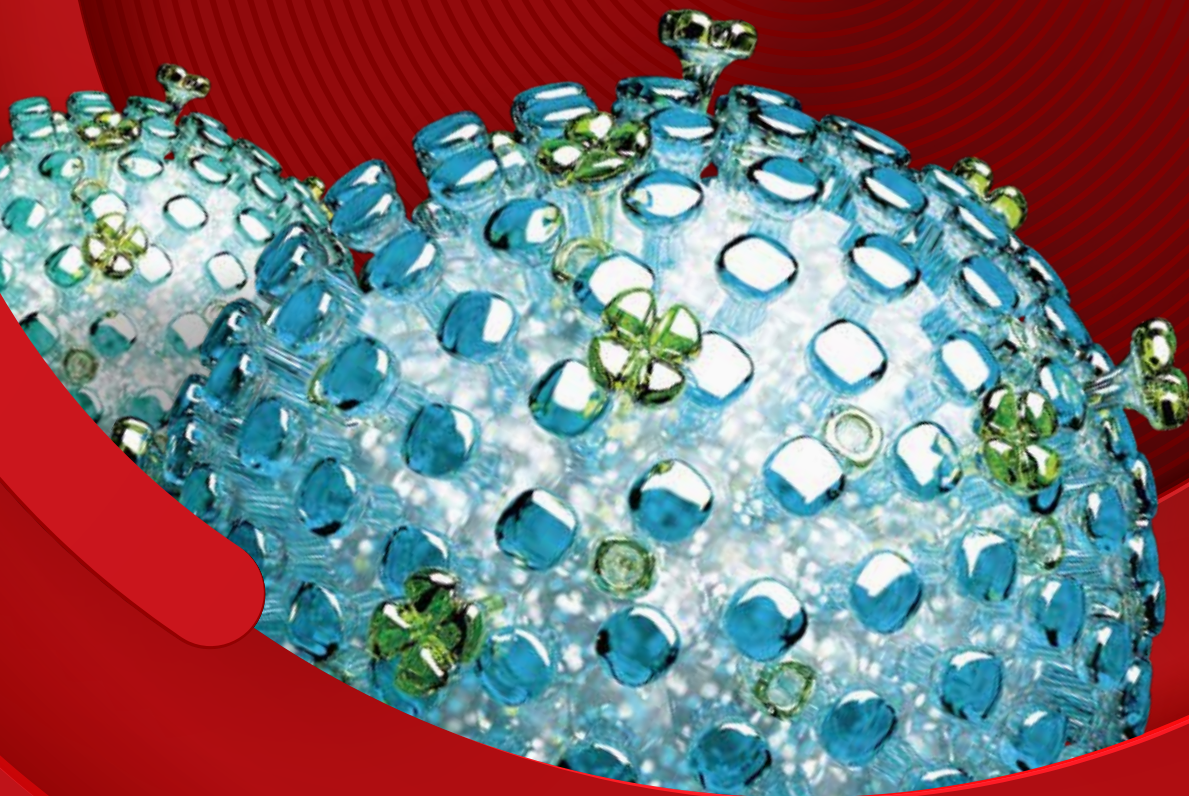
Respiratory Panel Assays

Comprehensive assay for the detection and identification of
26 pathogens using one-step real-time RT-PCR

16 Respiratory viruses / 3 Flu A subtypes / 7 Respiratory bacteria

World's 1st technology

Individual Ct value of multiple analytes in a single channel



HIGH SENSITIVITY & SPECIFICITY

Multiplex real-time PCR with high sensitivity and specificity by
utilization of DPO™ and TOCE™ technologies

 **Seegene**



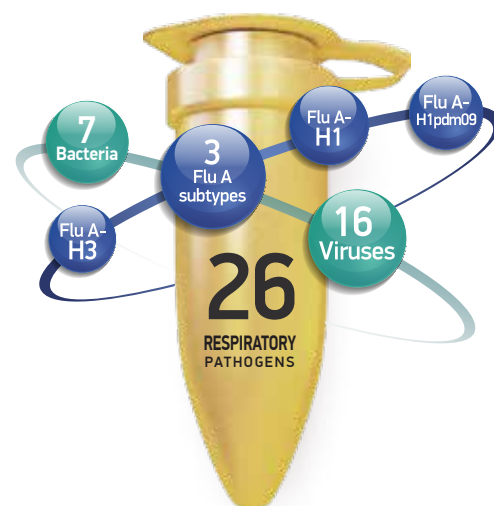
Respiratory Panel Assays

Comprehensive assay for the detection and identification of 26 pathogens using one-step real-time RT-PCR assay

Allplex™ Respiratory Panel Assays, composed of 4 different panels, is a multiplex one-step real-time RT-PCR assay to detect and identify 16 viruses, 3 Flu A subtypes and 7 bacteria in patient's specimens. Based on Seegene's proprietary MuDT™ technology, this assay makes it possible to report individual C_t value of each pathogen in a single channel on real-time PCR instrument. Allplex™ Respiratory Panel Assays allows faster, more reliable and comprehensive test results than any other products by combination with Seegene's automation platforms.

Key Features

- Full range of causative pathogens (23 pathogens with 3 Flu A subtypes) in respiratory tract infection
- Short TAT (within 4.5 hours) from extraction to the final results
- Informative data with individual C_t value for each analyte
- Useful tool for surveillance and infection control
- Automated data interpretation with Seegene Viewer



Analytes

1 tube / 1 panel

Panel 1	Panel 2	Panel 3	Panel 4
- Influenza A virus (Flu A) - Influenza B virus (Flu B) - Respiratory syncytial virus A (RSV A) - Respiratory syncytial virus B (RSV B) - Flu A-H1 - Flu A-H1pdm09 - Flu A-H3 - Internal Control (IC)	- Adenovirus (AdV) - Enterovirus (HEV) - Parainfluenza virus 1 (PIV 1) - Parainfluenza virus 2 (PIV 2) - Parainfluenza virus 3 (PIV 3) - Parainfluenza virus 4 (PIV 4) - Metapneumovirus (MPV) - Internal Control (IC)	- Bocavirus (HBoV) - Rhinovirus (HRV) - Coronavirus NL63 (CoV NL63) - Coronavirus 229E (CoV 229E) - Coronavirus OC43 (CoV OC43) - Internal Control (IC)	- <i>Bordetella parapertussis</i> (BPP) - <i>Bordetella pertussis</i> (BP) - <i>Chlamydia pneumoniae</i> (CP) - <i>Haemophilus influenzae</i> (HI) - <i>Legionella pneumophila</i> (LP) - <i>Mycoplasma pneumoniae</i> (MP) - <i>Streptococcus pneumoniae</i> (SP) - Internal Control (IC)

* Pending Health Canada submission and authorization

Compatible Instrumentation (CE-IVD Marked)

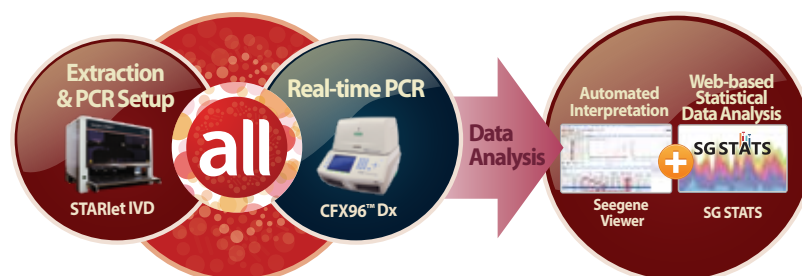
- **Automated Extraction & PCR Setup**
Seegene NIMBUS / Seegene STARlet
- **Automated Extraction**
NucliSENS® easyMAG®
SEEPREP32™
- **Real-time PCR**
CFX96™ Dx

Specimens

- Nasopharyngeal swab
- Nasopharyngeal aspirate
- Bronchoalveolar lavage
- Sputum* (Respiratory Panel 4 only)

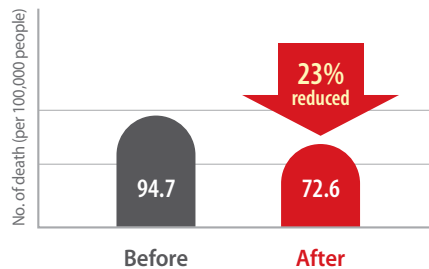
Seegene's Powerful Automation Platform for Complete Test Process

- User-friendly automation system
- Automatic data interpretation software optimized for multiplex assays
- Interlocked with LIS
- Multi-C_t values in a single channel



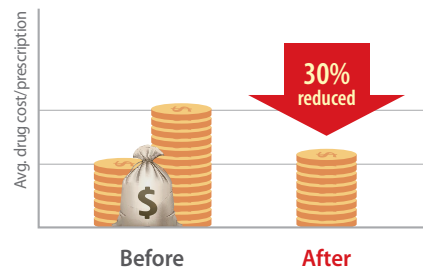
Effect of Applying Symptom-Based Approach on Respiratory Infections

· Mortality rates



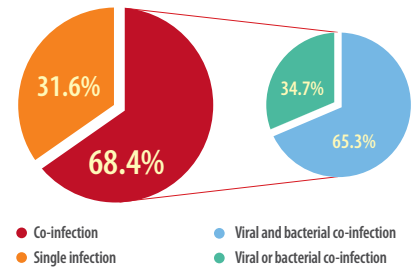
Symptom-based approach lowered mortality rate in patients with respiratory infections.¹⁾

· Drug costs



Identification of viral infections by symptom-based approach limited the inappropriate use of antimicrobials and led to reduction in treatment costs.²⁾

· Co-infection rates



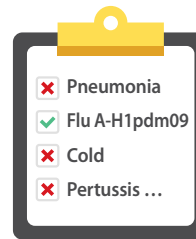
Co-infection rate in respiratory tract is relatively high, highlighting the importance of detecting both viruses and bacteria by multiplex assay.³⁾

Allplex™ Respiratory Panel Assays for Symptom-Based Approach



Allplex™ Respiratory Panel Assays

- 16 viruses
- 3 Flu A subtypes
- 7 bacteria

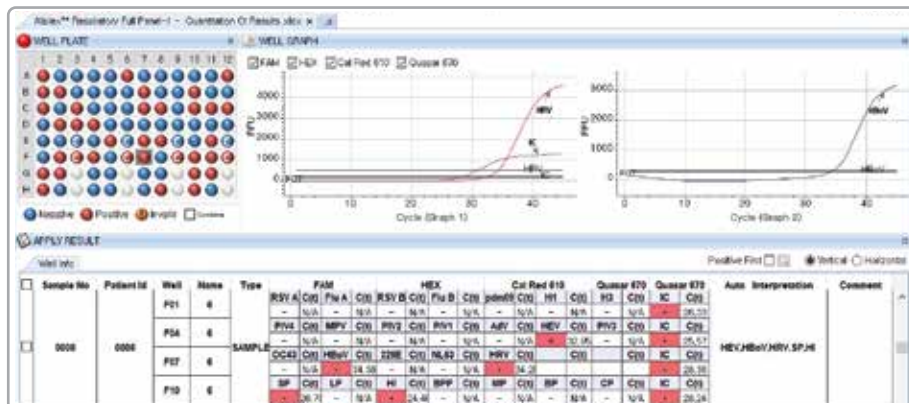


Allplex™ Respiratory Panel Assays simultaneously detects a broad range of viruses and bacteria in one sample, providing more effective and efficient results.

Reference

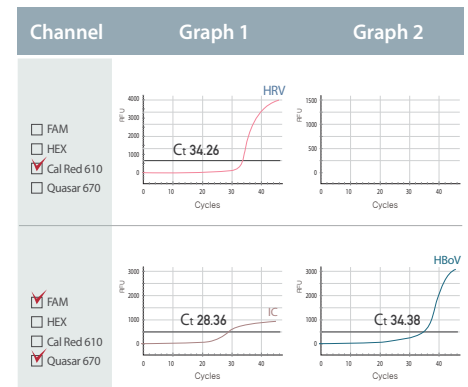
- 1) Sydykova S, et al. Kyrgyzstan Experience: Practical Approach to Lung Health Strategy – Solution for Controlling Common Respiratory Diseases. Geneva Health Forum, 18-20
- 2) Me'emary F, et al. Results of the feasibility test of the Practical Approach to Lung Health in the Syrian Arab Republic. East Mediterr Health J. (2009) 15: 504-515
- 3) Memish, Ziad A., et al. Etiology of severe community-acquired pneumonia during the 2013 Hajj – part of the MERS-CoV surveillance program. International Journal of Infectious Diseases. (2014) 25: 186-190

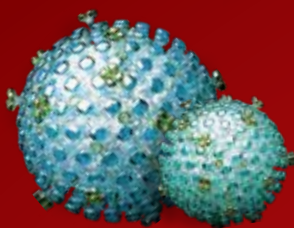
Result of Allplex™ Respiratory Panel Assays



Seegene Viewer provides integrated results of Allplex™ Respiratory Panel Assays. The result represents co-infection of *Streptococcus pneumoniae* (SP), *Haemophilus influenzae* (HI), Bocavirus (HBoV), Rhinovirus (HRV) and Enterovirus (HEV) with Ct values, respectively. Allplex™ Respiratory Panel Assays are able to provide the information of 16 viruses, 3 Flu A subtypes and 7 bacteria by analyzing individual Ct value using Seegene Viewer.

One channel, multi-Ct values





Respiratory Panel Assays

Key features

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Ordering Information

Category	Product	Package Volume	Cat. No.
Allplex™	Respiratory Panel 1	25 rxns*	RP10179Z
		50 rxns	RP9801Y
		100 rxns*	RP9801X
Allplex™	Respiratory Panel 2	25 rxns*	RP10180Z
		50 rxns	RP9802Y
		100 rxns*	RP9802X
Allplex™	Respiratory Panel 3	25 rxns*	RP10181Z
		50 rxns	RP9601Y
		100 rxns*	RP9601X
Allplex™	Respiratory Panel 4	25 rxns*	RP10182Z
		50 rxns	RP9803Y
		100 rxns*	RP9803X

Instrument	Cat. No.
CFX96™ Dx (2 modules)	1845097-IVD & 1841000-IVD
Seegene NIMBUS	65415-03
Seegene STARlet	67930-03
SEEPREP32™	SG71100
STARMag 96 X 4 Universal Cartridge Kit*	744300.4.UC384
STARMag 96 X 4 Viral DNA/RNA 200 C Kit*	EX00013C
STARMag 96 ProPrep**	EX00009P
	EX00009T
STARMag 96 ProPrep C**	EX00017P
	EX00017T

* For use with Seegene NIMBUS and Seegene STARlet, ** For use with SEEPREP32™

Not Available for Sale in the United States



Seoul, Republic of Korea, 05548 / Tel : +82-2-2240-4000 / E-mail : info@seegene.com

seegene.com

Brazil

Contagem, MG, Brazil
(+55) 31 25153003
contato@seegenebrazil.com.br

Canada

Toronto, Canada
(+1) 800 964 5680
canada@seegene.com

Germany

Düsseldorf, Germany
(+49) 211 83831 600
sgg@seegene.com

Mexico

México City, México
(+52) 55 5132 6490
marketing.mx@seegene.com

Middle East

Dubai, UAE
(+971) 4 558 7110
sgme@seegene.com

Italy

Genova, Italy
(+39) 010 667 1796
info@arrowdiagnostics.it

USA

California, USA
(+1) 925 448 8172
Info.seegeneusa@seegene.com