

CE-IVD Marked

 Allplex™

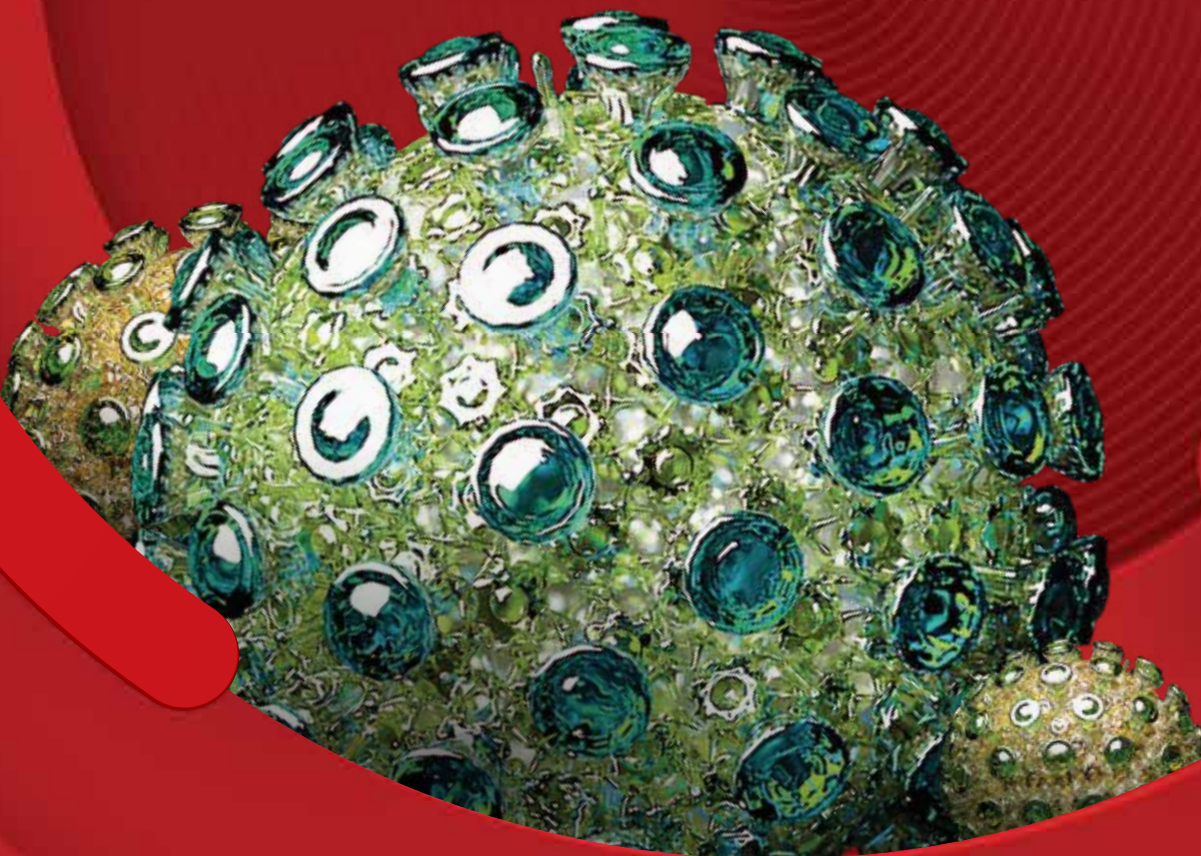
RV Essential Assay

Essential screening assay of 7 common viruses in a single tube

- Influenza A virus (Flu A)
- Influenza B virus (Flu B)
- Metapneumovirus (MPV)
- Respiratory syncytial virus A/B (RSV)
- Parainfluenza virus 1/2/3/4 (PIV)
- Adenovirus (AdV)
- Human rhinovirus A/B/C (HRV)

World's 1st technology

Individual Ct value of multiple analyte in a single channel



HIGH SENSITIVITY & SPECIFICITY

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

 **Seegene**

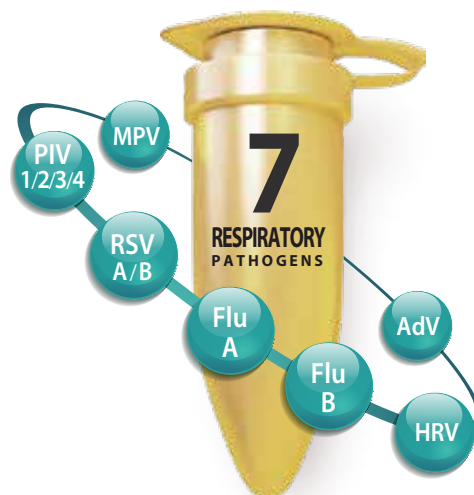


Allplex™ RV Essential Assay

Essential screening assay of 7 common respiratory viruses in a single tube

Respiratory infections are one of the most common diseases that can be experienced throughout life.¹⁾ The economic losses due to influenza are increasing every year, especially in the flu season, an estimated annual more than \$10 billion in direct costs for hospitalizations and outpatient visits for adults.²⁾ However, not only influenza but also other pathogens are involved in causing respiratory infections.^{3) 4) 5) 6)} There are 500 million non-influenza related VRTI (Viral respiratory tract infection) cases occur per year.⁷⁾

Allplex™ RV Essential Assay (EA) is a multiplex One-step reverse transcription real-time PCR assay in one-step for screening of Flu A, Flu B and RSV A/B with MPV, PIV, AdV and HRV in a single tube. This assay reports Individual Ct value of multiple analytes in a single channel on real-time PCR instruments. This assay is an ideal assay for screening essential respiratory pathogens by providing insightful solutions in cost- and time-saving manners.



Key Features

- One-step multiplex real-time reverse transcription PCR for screening 7 common causative agents of respiratory infections
- Reliable results within 2 hours after extraction
- Informative data with individual Ct value for multiple analytes
- Cost and time savings with only one tube
- Automated data interpretation with Seegene Viewer

Analytes

- Influenza A virus (Flu A)
- Influenza B virus (Flu B)
- Metapneumovirus (MPV)
- Respiratory syncytial virus A/B (RSV)
- Parainfluenza virus 1/2/3/4 (PIV)
- Adenovirus (AdV)
- Human rhinovirus A/B/C (HRV)
- Internal Control (IC)

Compatible Instrumentation (CE-IVD Marked)

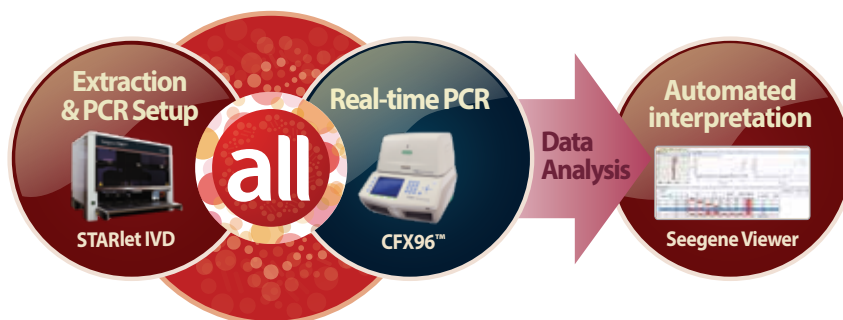
- | | |
|--|-------------------------------------|
| - Automated Extraction & PCR Setup
Seegene NIMBUS / Seegene STARlet | - Real-time PCR
CFX96™ Dx |
| - Automated Extraction
NucliSENS® easyMAG®
SEEPREP32™
MagNA Pure 96 | Maelstrom™ 9600
KingFisher™ Flex |

Specimens

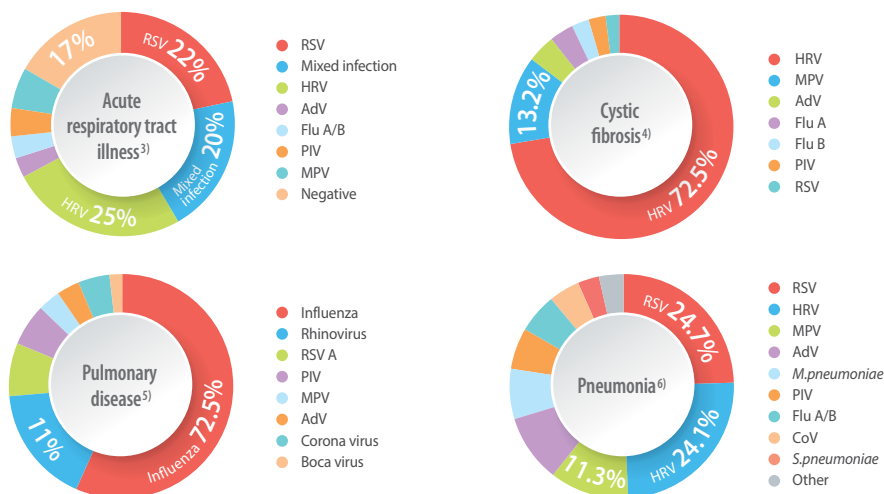
- Nasopharyngeal swab
- Nasopharyngeal aspirate
- Bronchoalveolar lavage

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-Ct values in a single channel



Clinical Impact of Respiratory Viruses - More Than Just Flu



Allplex™ RV Essential Assay screens of 7 common respiratory viruses that cause respiratory diseases such as acute respiratory tract illness, cystic fibrosis, pulmonary disease and pneumonia.

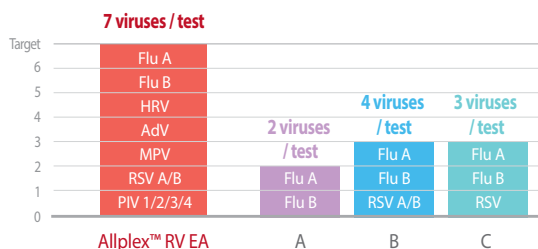
Reference

- 1) Johns Hopkins Medicine Health Library. http://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/upper_respiratory_infection_uri_or_common_cold_90,P02966 (2016)
- 2) Getting the flu can wreak havoc on your finances. CNBC Personal Finance (2017)
- 3) Diagnosis of respiratory syncytial virus infection. Open Microbiol J. (2011)
- 4) Incidence and clinical impact of respiratory viruses in adults with cystic fibrosis. Thorax. (2014)
- 5) Respiratory viruses in acute exacerbations of chronic obstructive pulmonary disease. Lung India. (2017)
- 6) Community-Acquired Pneumonia Requiring Hospitalization among U.S. Children. NEJM (2015)
- 7) The Economic Burden of Non-Influenza-Related Viral Respiratory Tract Infection in the United States. Arch Intern Med (2003)

Enhancement of Operational Efficiency

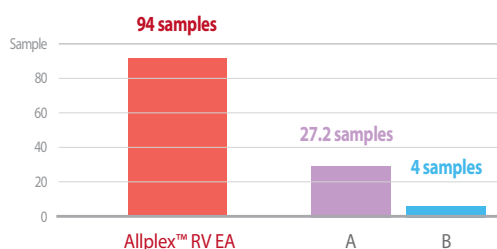
Extensive coverage

Comparison of coverage between other screening products and Allplex™ RV EA



High throughput

Comparison of test throughput between other multiplex PCR products and Allplex™ RV EA (for 4 hrs)

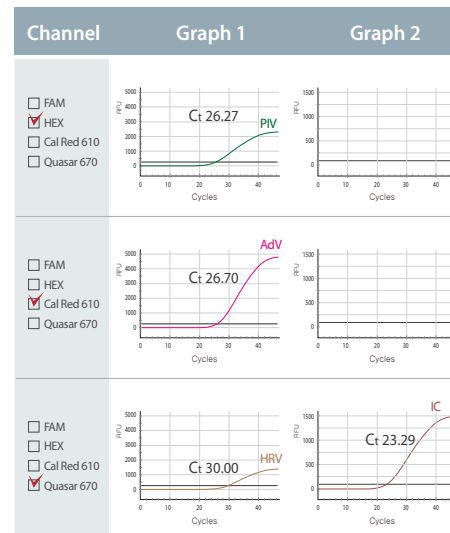


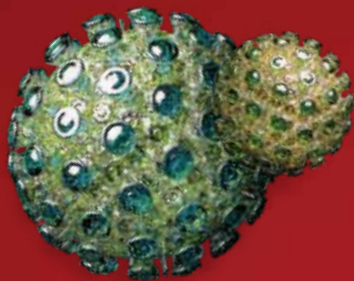
Result of Allplex™ RV Essential Assay



The result represents co-infection of PIV and AdV in HEX and Cal Red 610 channels with Ct values of 26.27 and 26.70 (Graph 1), respectively. It also represent the infection of HRV with Ct value of 30.00 (Graph 1) in Quasar 670 channel. Allplex™ RV Essential Assay is able to provide the individual Ct value of multiple pathogens using Seegene Viewer.

One channel, multi-Ct values





RV Essential Assay

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- Cost and time savings with only one tube
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Ordering Information

Product	Volume	Cat. No.
Allplex™ RV Essential Assay	50 rxns	RV9750Y
	100 rxns*	RV9750X

Instrument	Cat. No.
CFX96™ Dx (2 modules)	1845097-IVD & 1841000-IVD
Seegene NIMBUS	65415-03
Seegene STARlet	67930-03
SEEPREP32™	SG71100
Maelstrom™ 9600	M9600
STARMag 96 X 4 Universal Cartridge kit*	744300-4UC384
STARMag 96 x 4 viral DNA/RNA 200 C kit*	EX00013C
STARMag 96 ProPrep (Plate type)**	EX00009P
STARMag 96 ProPrep (Tube type)**	EX00009T
STARMag 96 ProPrep C (Plate type)**	EX00017P
STARMag 96 ProPrep C (Tube type)**	EX00017T
TANBEAD® Nucleic Acid Extraction kit***	
OptiPure Viral Auto Tube	W665566
OptiPure Viral Auto Plate	W665A46
OptiPure Viral Bulk Plate	W665A10

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

*** For use with Maelstrom™ 9600

- Not Available for Sale in the United States



Taewon Bldg. 91 Ogeum-ro, Songpa-gu, Seoul 05548, Republic of Korea / Tel : +82-2-2240-4000 / Fax : +82-2-2240-4040 / E-mail : info@seegene.com

www.seegene.com

BRAZIL

Belo Horizonte, Brazil
Tel : +55-31-25153003
E-mail : contato@seegenebrazil.com.br

CANADA

Toronto, Canada
Tel : +1-800-964-5680
E-mail : canada@seegene.com

GERMANY

Düsseldorf, Germany
Tel : +49-211-9943-4260
E-mail : sgg@seegene.com

MEXICO

México city, México
Tel : + 52 (55)-8848-9646
E-mail : mexico@seegene.com

MIDDLE EAST

Dubai, UAE
Tel : +971-4-558-7110
E-mail : sgme@seegene.com

USA

California, USA
Tel : +1-925-448-8172
E-mail : usa@seegene.com