



One sample. Many Answers.

Seegene USA has manufactured assays with advanced multiplex PCR technology since 2000. Our user-friendly workflow and comprehensive PCR results empower evidence-based research. With our cutting-edge proprietary technology, we enable the simultaneous detection of up to 9 targets in a single PCR reaction, streamlining your lab's efficiency and reducing costs.

High Multiplex Real-Time PCR Assays and Automated Solutions

Respiratory Targets

Product • Catalog Number • Number of Targets	
Allplex™ 2019-nCoV Assay • RP10252W	3
<ul style="list-style-type: none"> SARS-CoV-2 (E gene) SARS-CoV-2 (N gene) SARS-CoV-2 (RdRP gene) 	
Novaplex™ SARS-CoV-2/FluA/FluB/RSV Assay • R-RV10259W	6
<ul style="list-style-type: none"> SARS-CoV-2 (RdRP gene) SARS-CoV-2 (N gene) SARS-CoV-2 (S gene) Influenza A virus (Flu A) Influenza B virus (Flu B) Respiratory syncytial virus A/B (RSV A/B) 	
Novaplex™ RV Master Assay • R-RV70591X	8
<ul style="list-style-type: none"> SARS-CoV-2 (S gene / RdRP gene) Influenza A virus (Flu A) Influenza B virus (Flu B) Human respiratory syncytial virus (RSV) Human adenovirus (AdV) Human rhinovirus (HRV) Human metapneumovirus (MPV) Human parainfluenza virus (PIV) 	
Novaplex™ Respiratory Panel 1A • R-RP9702W	7
<ul style="list-style-type: none"> Flu A-H1 Flu A-H1pdm09 Flu A-H3 Influenza A virus (Flu A) Influenza B virus (Flu B) Respiratory syncytial virus A (RSV A) Respiratory syncytial virus B (RSV B) 	
Novaplex™ Respiratory Panel 2 • R-RP9802W	7
<ul style="list-style-type: none"> Adenovirus (AdV) Enterovirus (HEV) Metapneumovirus (MPV) Parainfluenza virus 1 (PIV 1) Parainfluenza virus 2 (PIV 2) Parainfluenza virus 3 (PIV 3) Parainfluenza virus 4 (PIV 4) 	
Novaplex™ Respiratory Panel 3 • R-RP9601W	5
<ul style="list-style-type: none"> Bocavirus 1/2/3/4 (HBov) Rhinovirus A/B/C (HRV) Coronavirus NL63 (CoV NL63) Coronavirus 229E (CoV 229E) Coronavirus OC43 (CoV OC43) 	
Novaplex™ PneumoBacter Assay • R-PB10176W	7
<ul style="list-style-type: none"> <i>Chlamydomphila pneumoniae</i> (CP) <i>Bordetella pertussis</i> (BP) <i>Bordetella parapertussis</i> (BPP) <i>Haemophilus influenzae</i> (HI) <i>Legionella pneumophila</i> (LP) <i>Mycoplasma pneumoniae</i> (MP) <i>Streptococcus pneumoniae</i> (SP) 	

Gastrointestinal Targets

Product • Catalog Number • Number of Targets	
Novaplex™ GI-Virus Assay • R-GI9701W	6
<ul style="list-style-type: none"> Adenovirus F (ADV-F) Astrovirus (ASV) Sapovirus (SV) Norovirus GI (NVG1) Norovirus GII (NVG2) Rotavirus A (ROV) 	
Novaplex™ GI-Bacteria (I) Assay • R-GI9801W	9
<ul style="list-style-type: none"> <i>Aeromonas</i> spp. (Aer) <i>Campylobacter</i> spp. (Cam) <i>C. perfringens</i> (Cp) <i>C. difficile</i> toxin A (CdA) <i>C. difficile</i> toxin B (CdB) <i>Salmonella</i> spp. (Sal) <i>Shigella</i> spp./EIEC (Sh/EI) <i>Vibrio</i> spp. (Vib) <i>Y. enterocolitica</i> (Yer) 	
Novaplex™ GI-Bacteria (II) Assay • R-GI9702W	6
<ul style="list-style-type: none"> Shiga toxin (stx1/2) <i>E. coli</i> O157 (O157) Hypervirulent <i>C. difficile</i> (CD hyper) EPEC (eaeA) ETEC (It/st) EAEC (aggR) 	
Novaplex™ GI-Parasite Assay • R-GI9703W	6
<ul style="list-style-type: none"> <i>Blastocystis hominis</i> (BH) <i>Cryptosporidium</i> spp. (CR) <i>Cyclospora cayetanensis</i> (CC) <i>Dientamoeba fragilis</i> (DF) <i>Entamoeba histolytica</i> (EH) <i>Giardia lamblia</i> (GL) 	
Novaplex™ GI-Helminth (I) Assay • R-GI10191W	9
<ul style="list-style-type: none"> <i>Enterocytozoon</i> spp. / <i>Encephalitozoon</i> spp. (EN) <i>Hymenolepis</i> spp. (HY) <i>Taenia</i> spp. (TA) <i>Enterobius vermicularis</i> (EV) <i>Strongyloides</i> spp. (ST) <i>Ascaris</i> spp. (AS) <i>Trichuris trichiura</i> (TT) <i>Ancylostoma</i> spp. (AN) <i>Necator americanus</i> (NA) 	

Fungal Targets

Product • Catalog Number • Number of Targets	
Novaplex™ Dermatophyte Assay • R-DE10261X	6
<ul style="list-style-type: none"> <i>Candida albicans</i> (CA) <i>Epidermophyton floccosum</i> (EF) <i>Microsporum</i> spp. (Mspp) <i>Trichophyton tonsurans</i> (TT) <i>Trichophyton rubrum</i> complex (TRC) <i>Trichophyton mentagrophytes</i> complex (TMC) 	



Sexually Transmitted Targets

Product • Catalog Number • Number of Targets
Novaplex™ STI Essential Assay • R-SD9801W 7
<ul style="list-style-type: none"> Chlamydia trachomatis (CT) Neisseria gonorrhoeae (NG) Mycoplasma genitalium (MG) Mycoplasma hominis (MH) Trichomonas vaginalis (TV) Ureaplasma urealyticum (UU) Ureaplasma parvum (UP)
Novaplex™ Genital Ulcer Assay • R-SD9802W 7
<ul style="list-style-type: none"> Cytomegalovirus (CMV) Lymphogranuloma venereum (LGV) Chlamydia trachomatis Serovar L Haemophilus ducreyi (HD) Herpes simplex virus type 1 (HSV-1) Herpes simplex virus type 2 (HSV-2) Treponema pallidum (TP) Varicella-zoster virus (VZV)
Novaplex™ CT/NG/MG/TV Assay • R-SD10217W 4
<ul style="list-style-type: none"> Chlamydia trachomatis (CT) Mycoplasma genitalium (MG) Neisseria gonorrhoeae (NG) Trichomonas vaginalis (TV)
Novaplex™ MPXV/OPXV Assay • R-PX70603X 2
<ul style="list-style-type: none"> Monkeypox virus (MPXV) Non-variola Orthopoxvirus (OPXV)



Vector-borne Targets

Product • Catalog Number • Number of Targets
Novaplex™ Malaria Assay • R-VB10369W 5
<ul style="list-style-type: none"> Plasmodium vivax (PV) Plasmodium ovale (PO) Plasmodium falciparum (PF) Plasmodium malariae (PM) Plasmodium knowlesi (PK)
Novaplex™ Tick-borne Disease Assay • R-TD9900W 9
<ul style="list-style-type: none"> Borrelia mayonii Borrelia burgdoferi sensu stricto Babesia duncani Babesia microti Borrelia miyamotoi (Bmi) Rickettsia spp. (Rcke) Anaplasma phagocytophilum (AP) Ehrlichia ewingii Ehrlichia chaffensis
Novaplex™ Tropical Fever Virus Assay • R-TF10208W 4
<ul style="list-style-type: none"> Dengue virus (DENV) Chikungunya virus (CHIKV) Zika virus (ZIKV) West Nile virus (WNV)



Streptococcal Targets

Product • Catalog Number • Number of Targets
Novaplex™ GBS Typing Assay • R-SD10256Z 9
<ul style="list-style-type: none"> GBS serotype Ia GBS serotype Ib GBS serotype II GBS serotype III GBS serotype IV GBS serotype VI GBS serotype V Others (GBS serotype VII, VIII, IX) GBS screening



Vaginal Targets

Product • Catalog Number • Number of Targets
Novaplex™ Aerobic Vaginitis Assay • R-SD9700W 7
<ul style="list-style-type: none"> Escherichia coli (EC) Enterococcus faecalis (EF) Lactobacillus spp. (Lacto) Staphylococcus aureus (SA) Lactobacillus reuteri & Lactobacillus rhamnosus (LR) Streptococcus pyogenes (GAS) Streptococcus agalactiae (GBS)
Novaplex™ Bacterial Vaginosis Assay • R-SD9804W 7
<ul style="list-style-type: none"> Atopobium vaginae (AV) Bacteroides fragilis (BF) Gardnerella vaginalis (GV) Mobiluncus spp. (Mob) Lactobacillus spp. (Lacto) Megasphaera Type 1 (Mega1) Bacterial vaginosis associated bacteria 2 (BVAB2)
Novaplex™ Candidiasis Assay • R-SD9803W 7
<ul style="list-style-type: none"> Candida albicans (CA) Candida krusei (CK) Candida glabrata (CG) Candida dubliniensis (CD) Candida parapsilosis (CP) Candida tropicalis (CTP) Candida lusitanae (CL)



Human Papillomavirus (HPV) Targets

Product • Catalog Number • Number of Targets
Novaplex™ HPV28 Detection • R-HP70522W 28
<ul style="list-style-type: none"> HPV 16 HPV 18 HPV 26 HPV 31 HPV 33 HPV 35 HPV 39 HPV 45 HPV 51 HPV 52 HPV 53 HPV 56 HPV 58 HPV 59 HPV 66 HPV 68 HPV 69 HPV 73 HPV 82 HPV 6 HPV 11 HPV 40 HPV 42 HPV 61 HPV 70
Novaplex™ HPV HR Detection • R-HP70523W 14
<ul style="list-style-type: none"> HPV 16 HPV 18 HPV 31 HPV 33 HPV 35 HPV 39 HPV 45 HPV 51 HPV 52 HPV 56 HPV 58 HPV 59 HPV 66 HPV 68



Meningeal Targets

Product • Cat. No.
Novaplex™ Meningitis-V1 Assay • R-MG70519Z 7
<ul style="list-style-type: none"> Herpes simplex virus 1 (HSV1) Herpes simplex virus 2 (HSV2) Human cytomegalovirus (CMV) Epstein-barr virus (EBV) Human herpes virus 6 (HHV6) Human herpes virus 7 (HHV7) Varicella-zoster virus (VZV)
Novaplex™ Meningitis-V2 Assay • R-MG70521Z 5
<ul style="list-style-type: none"> Parvovirus B19 (B19V) Mumps virus (MV) Human adenovirus (AdV) Human enterovirus (HEV) Human parechovirus (HPeV)
Novaplex™ Meningitis-B Assay • R-MG70510Z 6
<ul style="list-style-type: none"> Haemophilus influenzae (HI) Escherichia coli K1 (EC K1) Listeria monocytogenes (LM) Neisseria meningitidis (NM) Streptococcus agalactiae (GBS) Streptococcus pneumoniae (SP)



Resistance Gene Targets



Resistance Genes – Sexual Transmitted Targets

Product • Catalog Number • Number of Targets	
Novaplex™ <i>H. pylori</i> & ClariR Assay • R-HC70508W	4
<ul style="list-style-type: none"> • <i>H. pylori</i> (HP) 	<ul style="list-style-type: none"> • A2143G • A2142G • A2142C
Novaplex™ Entero-DR Assay • R-CR10215W	8
<ul style="list-style-type: none"> • Carbapenemase genes (NDM) • Carbapenemase genes (KPC) • Carbapenemase genes (OXA48) • Carbapenemase genes (VIM) 	<ul style="list-style-type: none"> • Carbapenemase genes (IMP) • Extended Spectrum Beta Lactamase gene (ESBL) • CTX-M gene • Vancomycin resistance genes (VanA, VanB) genes
Novaplex™ MTB/XDRe Detection • To be released	7
<ul style="list-style-type: none"> • <i>Mycobacterium tuberculosis</i> (MTB) • 13 mutations associated with XDR-TB 	<ul style="list-style-type: none"> • Injectable drug-resistance (6 mutations) • Fluoroquinolone-resistance (7 mutations)

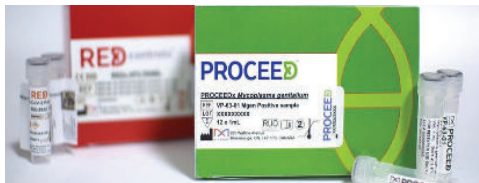
Product • Catalog Number • Number of Targets	
Novaplex™ MG & AziR Assay • R-SD10193W	7
<ul style="list-style-type: none"> • <i>Mycoplasma genitalium</i> (MG) 	<ul style="list-style-type: none"> • A2059C (mutation of 23S rRNA) • A2058T (mutation of 23S rRNA) • A2059G (mutation of 23S rRNA) • A2058C (mutation of 23S rRNA) • A2059T (mutation of 23S rRNA) • A2058G (mutation of 23S rRNA)
Novaplex™ MG & MoxiR Assay • R-SD10233W	5
<ul style="list-style-type: none"> • <i>Mycoplasma genitalium</i> (MG) 	<ul style="list-style-type: none"> • G259A (mutation of <i>parC</i>) • A247C (mutation of <i>parC</i>) • G259C (mutation of <i>parC</i>) • G248A (mutation of <i>parC</i>) • G259T (mutation of <i>parC</i>) • G248T (mutation of <i>parC</i>)
Novaplex™ NG & DR Assay • R-SD70518Z	4
<ul style="list-style-type: none"> • A2059G (mutation of 23S rRNA) • C2611T (mutation of 23S rRNA) • S91F (mutation of gyrase A) 	<ul style="list-style-type: none"> • <i>Neisseria gonorrhoeae</i> 1 (NG1) • <i>Neisseria gonorrhoeae</i> 2 (NG2)

Molecular Controls

Seegene distributes easy-to-use controls for molecular testing.

Microbix Quality Assessment Products (QAPs™)

Quality Assessment Products (QAPs™) help provide optimal results for laboratories performing high-multiplex PCR testing.



Quality Assessment Products (QAPs) manufactured by Microbix. Distributed by Seegene USA, Inc.

MICROBIX REDx™ QAPs™ are unassayed controls that can be used for ongoing QC.

MICROBIX PROCEEDx™ & ONBOARDx™ QAPs™ are for Research Use Only. Not for use in Diagnostic procedures.

ZeptoMetrix NATtrol™ Molecular Controls

Regular use of ZeptoMetrix Molecular Controls helps monitor testing performance and boosts confidence in quality.



NATtrol™ Controls manufactured by ZeptoMetrix®. Distributed by Seegene USA, Inc.

Zeptomatrix® molecular controls are for Research Use Only. Not for use in Diagnostic procedures.

BENEFITS & FEATURES	Microbix	ZeptoMetrix®	BOTH
FEATURES:			
Inactivated and non-hazardous	✓	✓	✓
Storage at 2-8°C (vial) and 2-30°C (swab)	✓	✓	✓
Shelf stable for up to 2 years	✓	✓	✓
Manufactured from native pathogens or synthetic whole-genome materials	✓	✓	✓
BENEFITS:			
Easy-to-use and cost effective	✓	✓	✓
Can be used across various molecular testing platforms and assays	✓	✓	✓
Available in different formats (single or multiple analytes)	✓	✓	✓
Full process controls to monitor extraction and amplification steps	✓	✓	✓
Evaluate lot-to-lot consistency of test kits and assay reagents	✓	✓	✓

Compatible Instruments

Seegene STARlet	Seegene Nimbus
<ul style="list-style-type: none"> • 8 channels 	<ul style="list-style-type: none"> • 4 channels
<ul style="list-style-type: none"> • Extraction throughput: 96 samples in 2.5 hours 	<ul style="list-style-type: none"> • Extraction throughput: 40 samples in 1.6 hours • 72 samples in 2.5 hours
<ul style="list-style-type: none"> • 44.25 (W) x 31.3 (D) x 33.55 (H) in 	<ul style="list-style-type: none"> • 41 (W) x 26.5 (D) x 31.5 (H) in
<ul style="list-style-type: none"> • Weight: 223.55 lbs 	<ul style="list-style-type: none"> • Weight: 297.62 lbs
<ul style="list-style-type: none"> • Maximum Power consumption: 600 W (depending on configuration) 	<ul style="list-style-type: none"> • Maximum power consumption: 600W

Instrument Ordering Information

	Instrument Name	Cat. No.	Application
Extraction	Seegene STARlet	67930-03	Automated extraction & PCR setup
	Seegene Nimbus	65415-03	Automated extraction & PCR setup
Real-time PCR	<ul style="list-style-type: none"> • CFX Opus Dx 96[†] • CFX Opus 96[†] • CFX96 Touch[†] • CFX96 Dx[†] 	Purchase from Bio-Rad [†]	Real-time PCR - Thermal Cycler

[†] The CFX Opus Dx 96, CFX Opus 96, CFX96 Touch, and CFX96 Dx instruments are sold directly by Bio-Rad in the U.S. Please contact Seegene for more information.

Automated Systems Workflow

STEP 1:

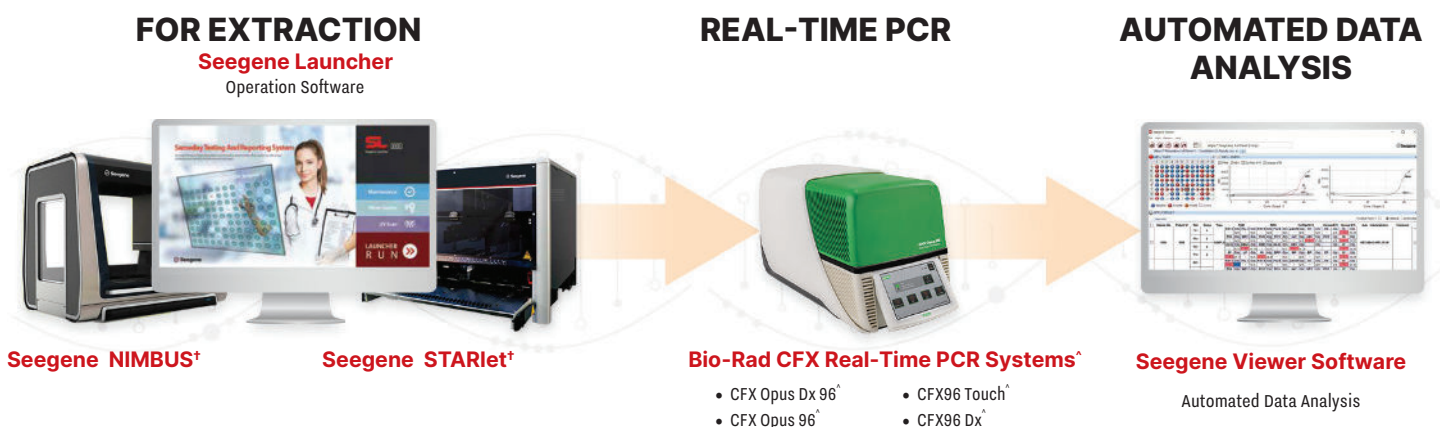
Prepare PCR kits, extraction kits, and consumables.

STEP 2:

Follow work instructions on Seegene Launcher for extraction and PCR setup using Seegene NIMBUS/STARlet.

STEP 3:

After extraction, seal plate and place in Bio-Rad CFX Opus Dx 96[†], CFX Opus 96[†], CFX96 Touch[†], or CFX96 Dx[†] for real-time PCR results.



** Extraction methods are not limited to the Seegene NIMBUS and Seegene STARlet.

[†] Seegene NIMBUS, Seegene STARlet, Seegene Launcher and Viewer software are For Research Use Only. Not for Use in Diagnostic Procedures.

[†] The CFX Opus Dx 96, CFX Opus 96, CFX96 Touch, and CFX96 Dx instruments are sold directly by Bio-Rad in the U.S. Please contact Seegene for more information.