



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"> Chlamydia pneumoniae (CP) Bordetella pertussis (BP) Bordetella parapertussis (BPP) Haemophilus influenzae (HI) Legionella pneumophila (LP) Mycoplasma pneumoniae (MP) Streptococcus pneumoniae (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"> Aeromonas spp. (Aer) Campylobacter spp. (Cam) C. perfringens (Cp) C. difficile toxin A (CdA) C. difficile toxin B (CdB) Salmonella spp. (Sal) Shigella spp./EIEC (Sh/EI) Vibrio spp. (Vib) Y. enterocolitica (Yer) 	
Novaplex™ GI-Bacteria (II) Assay • R-GI9702W	6
<ul style="list-style-type: none"> Shiga toxin (stx1/2) E. coli O157 (O157) Hypervirulent C. difficile (CD hyper) EPEC (eaeA) ETEC (It/st) EAEC (aggR) 	
Novaplex™ GI-Parasite Assay • R-GI9703W	6
<ul style="list-style-type: none"> Blastocystis hominis (BH) Cryptosporidium spp. (CR) Cyclospora cayetanensis (CC) Dientamoeba fragilis (DF) Entamoeba histolytica (EH) Giardia lamblia (GL) 	
Novaplex™ GI-Helminth (I) Assay • R-GI10191W	9
<ul style="list-style-type: none"> Enterocytozoon spp. / Encephalitozoon spp. (EN) Hymenolepis spp. (HY) Taenia spp. (TA) Enterobius vermicularis (EV) Strongyloides spp. (ST) Ascaris spp. (AS) Trichuris trichiura (TT) Ancylostoma spp. (AN) Necator americanus (NA) 	

Fungal Targets

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



Sexually Transmitted Targets

Product • Catalog Number • Number of Targets

Novaplex™ STI Essential Assay • R-SD9801W 7

- *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

- 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

- *Chlamydia trachomatis* (CT)
- *Mycoplasma genitalium* (MG)
- *Neisseria gonorrhoeae* (NG)
- *Trichomonas vaginalis* (TV)

Novaplex™ MPOX/OPXV Assay • R-PX70603X 2

- Monkeypox virus (MPXV)
- Non-variola Orthopoxvirus (OPXV)



Vector-borne Targets

Product • Catalog Number • Number of Targets

Novaplex™ Malaria Assay • R-VB10369W 5

- *Plasmodium vivax* (PV)
- *Plasmodium ovale* (PO)
- *Plasmodium falciparum* (PF)
- *Plasmodium malariae* (PM)
- *Plasmodium knowlesi* (PK)

Novaplex™ Tick-borne Disease Assay • R-TD9900W 9

- *Borrelia mayonii*
- *Borrelia burgdorferi 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

- 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

- 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

- *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

- *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

- *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

- 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 6
- HPV 43
- HPV 44
- HPV 54
- HPV 61
- HPV 70

Novaplex™ HPV HR Detection • R-HP70523W 14

- 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

- 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

- Parvovirus B19 (B19V)
- Mumps virus (MV)
- Human adenovirus (AdV)
- Human enterovirus (HEV)
- Human parechovirus (HPeV)

Novaplex™ Meningitis-B Assay • R-MG70510Z 6

- *Haemophilus influenzae* (HI)
- *Escherichia coli* K1 (EC K1)
- *Listeria monocytogenes* (LM)
- *Neisseria meningitidis* (NM)
- *Streptococcus agalactiae* (GBS)
- *Streptococcus pneumoniae* (SP)



Resistance Gene 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)



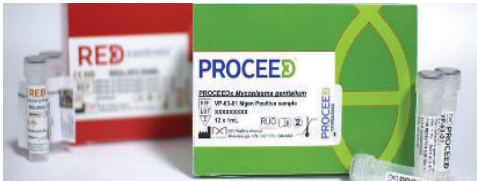
Resistance Genes – Sexual Transmitted Targets

Product • Catalog Number • Number of Targets	
Novaplex™ MG & AziR Assay • R-SD10193W 7	
<ul style="list-style-type: none"> <i>Mycoplasma genitalium</i> (MG) A2058T (mutation of 23S rRNA) A2058C (mutation of 23S rRNA) A2058G (mutation of 23S rRNA) 	<ul style="list-style-type: none"> A2059C (mutation of 23S rRNA) A2059G (mutation of 23S rRNA) A2059T (mutation of 23S rRNA)
Novaplex™ MG & MoxiR Assay • R-SD10233W 5	
<ul style="list-style-type: none"> <i>Mycoplasma genitalium</i> (MG) A247C (mutation of <i>parC</i>) G248A (mutation of <i>parC</i>) G248T (mutation of <i>parC</i>) 	<ul style="list-style-type: none"> G259A (mutation of <i>parC</i>) G259C (mutation of <i>parC</i>) G259T (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.