

Microbix Quality Assessment Products (QAPs™) are whole-process, external quality controls that are designed to resemble patient specimens. These products are formulated with native pathogens or protected synthetic whole-genome targets that are inactivated to meet clinical laboratory biosafety requirements. Microbix external quality controls monitor the entire diagnostic workflow, including

preanalytical patient sample collection and processing steps, lysis, extraction, and purification (if applicable), target detection, and analysis. All products are commutable, cross-platform compatible, and have verified performance on leading IVD assays. Microbix offers swab-based and liquid-based QAPs™ formats to meet a variety of end-user needs.



Properties of Swab QAPs™

- Optimal for Point of Care (POC) near-patient testing workflows
- Stable for up to 2 years when stored at 2-30°C
- Desiccated on a Copan FLOQSwab®
- Can be eluted in your choice of media
- Preferable storage conditions for distribution/supply chain logistics
- Excellent lot-to-lot reproducibility

Properties of Liquid QAPs™

- Optimal for high-throughput central laboratory workflows
- Stable for up to 2 years when stored at 2-8°C
- Volume: 0.5 -1.0mL
- Excellent lot-to-lot reproducibility and homogeneity

Maximize your UP TIME:
our controls help detect workflow performance issues before they affect your results



AT THE CORE OF QUALITY

QAPs™ Product Lines Intended Use

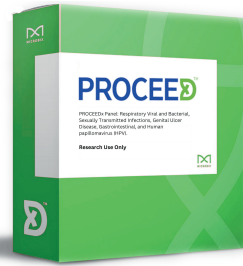


RED[®] controls RED[®]FLOQ[™]



REDx™ products are unassayed controls that can be used for ongoing external quality control, benchmarking laboratory testing performance, operator training & competency, and end-to-end workflow evaluation.

PROCEED[®] PROCEED[®]FLOQ[™]



PROCEEDx™ products are used for assay verification/validation, training, and R&D purposes. Products are for **RESEARCH USE ONLY!**

PTD[®]



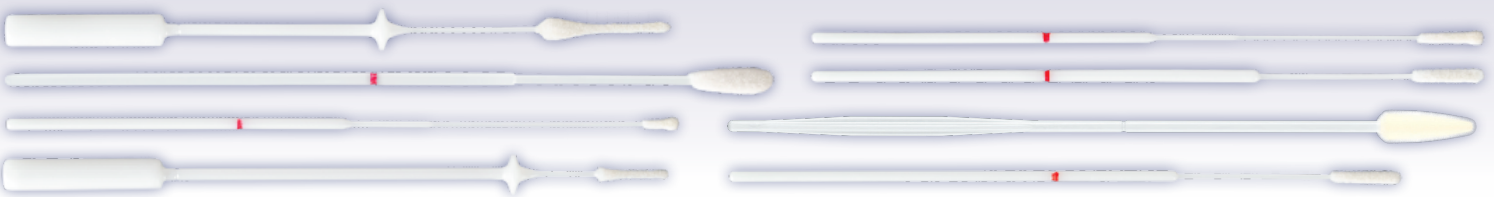
PTDx™ products are used as challenge samples in laboratory Proficiency Testing and External Quality Assessment programs.

ONBOARD[®] kit



ONBOARDx™ are all-encompassing sample kits for assay verification/validation, instrument qualification and operator training. Kits contain positive and negative samples from the **PROCEEDx™** product line. Products are for **RESEARCH USE ONLY!**

Copan Partnership



PANEL 1: SARS Complete Panel



SARS-CoV-2 Swab QAPs™

- » Stable for 2 years when stored at 2-30°C
- » SARS-CoV-2 Variants of Concern products are designed with all clade-specific SNPs, deletions, and insertions present

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
SARS-CoV-2 Positive Swab	PT-S-19-01	VP-S-19-01	RED-S-19-01	MDx
Respiratory NAAT SARS-CoV-2 Positive Swab (Ultra Low)	PT-S-19-L1	VP-S-19-L1	–	MDx
SARS-CoV-2 Ag Positive Swab	PT-S-19-02	VP-S-19-02	RED-S-19-02	Immuno
SARS-CoV-2 B.1.1.7 Positive Swab	PT-S-19-03	VP-S-19-03	RED-S-19-03	MDx
SARS-CoV-2 B.1.351 Positive Swab	PT-S-19-04	VP-S-19-04	RED-S-19-04	MDx
SARS-CoV-2 P.1 Positive Swab	PT-S-19-05	VP-S-19-05	RED-S-19-05	MDx
SARS-CoV-2 B.1.617 Positive Swab	PT-S-19-06	VP-S-19-06	RED-S-19-06	MDx
SARS-CoV-2 B.1.1.529 Positive Swab	PT-S-19-07	VP-S-19-07	RED-S-19-07	MDx
Multi-Target Products				
SARS-CoV-2/FluA&B/RSV Positive Swab	PT-S-19-M1	VP-S-19-M1	RED-S-19-M1	MDx
Respiratory NAAT Influenza A & SARS-CoV-2 Positive Swab	PT-S-13-M4 ¹	VP-S-13-M4 ¹	RED-S-13-M4 ¹	MDx
Respiratory NAAT Influenza B & SARS-CoV-2 Positive Swab	PT-S-14-M3 ¹	VP-S-14-M3 ¹	RED-S-14-M3 ¹	MDx
Respiratory NAAT RSV & SARS-CoV-2 Positive Swab	PT-S-07-M2 ¹	VP-S-07-M2 ¹	RED-S-07-M2 ¹	MDx
Negative-Target Products				
SARS-CoV-2 Negative Swab (IVD) NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	RED-S-99-M4	MDx
Respiratory Negative Swab (IVD) Negative Swab (RUO)	PT-S-99-01	VP-S-99-01	RED-S-99-01	Immuno

¹ Products are only for sale in Canada and the United States

SARS-CoV-2 Liquid QAPs™

- » Stable for 2 years when stored at 2-8°C; 0.5 mL volume

Products	PTDx™	PROCEEDx™	REDx™	Assay Compatibility
Single-Target Products				
SARS-CoV-2 Positive Sample	PT-19-01	VP-19-01	RED-19-01	MDx
Negative-Target Products				
SARS-CoV-2 Negative Sample	PT-99-M3	VP-99-M3	RED-99-M3	MDx

PANEL 2:
Respiratory Viral Panel



Respiratory Viral Swab QAPs™

» Swab formulations are stable for 2 years when stored at 2-30°C

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Influenza A Positive Swab	PT-S-13-01	VP-S-13-01	RED-S-13-01 ¹	MDx, Immuno
Influenza A NAAT Positive Swab	PT-S-13-M1	VP-S-13-M1	RED-S-13-M1 ¹	MDx
Influenza A NAAT Positive Swab (Low Level)	PT-S-13-M1L	VP-S-13- M1L	RED-S-13- M1L ¹	MDx
Influenza A NAAT Positive Swab (Ultra Low)	PT-S-13-L1	VP-S-13-L1	–	MDx
Influenza B Positive Swab	PT-S-14-01	VP-S-14-01	RED-S-14-01 ¹	MDx, Immuno
Influenza B NAAT Positive Swab	PT-S-14-M1	VP-S-14-M1	RED-S-14-M1 ¹	MDx
Influenza B NAAT Positive Swab (Low Level)	PT-S-14- M1L	VP-S-14- M1L	RED-S-14- M1L ¹	MDx
Influenza B NAAT Positive Swab (Ultra Low)	PT-S-14-L1	VP-S-14-L1	–	MDx
RSV Positive Swab	PT-S-07-01	VP-S-07-01	RED-S-07-01 ¹	MDx, Immuno
RSV NAAT Positive Swab	PT-S-07-M1	VP-S-07-M1	RED-S-07-M1 ¹	MDx
RSV NAAT Positive Swab (Low Level)	PT-S-07-M1L	VP-S-07- M1L	RED-S-07- M1L ¹	MDx
Respiratory NAAT RSV Positive Swab (Ultra Low)	PT-S-07-L1	VP-S-07-L1	–	MDx
Multi-Target Products				
Respiratory NAAT Influenza A and Influenza B Positive Swab	PT-S-13-M2	VP-S-13-M2	RED-S-13-M2 ¹	MDx
Respiratory NAAT Influenza A and RSV Positive Swab	PT-S-13-M3	VP-S-13-M3	RED-S-13-M3 ¹	MDx
Respiratory NAAT Influenza A and SARS-CoV-2 Positive Swab	PT-S-13-M4	VP-S-13-M4	RED-S-13-M4 ¹	MDx
Respiratory NAAT Influenza B and RSV Positive Swab	PT-S-14-M2	VP-S-14-M2	RED-S-14-M2 ¹	MDx
Respiratory NAAT Influenza B and SARS-CoV-2 Positive Swab	PT-S-14-M3	VP-S-14-M3	RED-S-14-M3 ¹	MDx
Respiratory NAAT RSV and SARS-CoV-2 Positive Swab	PT-S-07-M2	VP-S-07-M2	RED-S-07-M2 ¹	MDx
Negative-Target Products				
Respiratory Negative Swab (IVD) Negative Swab (RUO)	PT-S-99-01	VP-S-99-01	RED-S-99-01	Immuno
SARS-CoV-2 Negative Swab (IVD) NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	RED-S-99-M4	MDx

¹ Products are only for sale in Canada and the United States

PANEL 2:
Respiratory Viral Panel



Respiratory Viral Liquid QAPs™

» Stable for up to 2 years when stored at 2-8°C; 1.0 mL volume

Products	PTDx™	PROCEEDx™	REDx™	Assay Compatibility
Single-Target Products				
Influenza A Positive Sample	PT-13-01	VP-13-01	RED-13-01 ²	MDx, Immuno
Influenza B Positive Sample	PT-14-01	VP-14-01	RED-14-01 ²	MDx, Immuno
Respiratory Syncytial Virus (RSV) Positive Sample	PT-07-01	VP-07-01	RED-07-01 ²	MDx, Immuno
Adenovirus Positive Sample	PT-15-01	VP-15-01	–	MDx ¹ , Immuno
Parainfluenza 3 Positive Sample	PT-10-M1	VP-10-M1	–	MDx
Multi-Target Products				
Influenza A + B Positive Sample	PT-13-02	VP-13-02	RED-13-02 ²	MDx, Immuno
Influenza A + RSV Positive Sample	PT-13-03	VP-13-03	–	MDx, Immuno
Influenza A + Adenovirus Positive Sample	PT-13-04	VP-13-04	–	MDx ¹ , Immuno
Influenza A + Rotavirus Positive Sample	PT-13-05	VP-13-05	–	MDx ¹ , Immuno
Influenza B + RSV Positive Sample	PT-14-02	VP-14-02	–	MDx ¹ , Immuno
Influenza B + Adenovirus Positive Sample	PT-14-03	VP-14-03	–	MDx ¹ , Immuno
Influenza B + Rotavirus Positive Sample	PT-14-04	VP-14-04	–	MDx ¹ , Immuno
Adenovirus + RSV Positive Sample	PT-07-02	VP-07-02	–	MDx ¹ , Immuno
RSV+ Rotavirus Positive Sample	PT-07-03	VP-07-03	–	MDx ¹ , Immuno
Adenovirus + Rotavirus Sample	PT-15-02	VP-15-02	–	MDx ¹ , Immuno
Negative-Target Products				
Negative Sample	PT-99-01	VP-99-01	–	Immuno
Negative Sample (MDx)	PT-99-M2	VP-99-M2	–	MDx, Immuno

¹ Products are QC-released with immunoassays but are also compatible with molecular assays

² Products are only for sale in Canada and the United States

PANEL 3:
Group A Streptococcus Panel



» Stable for 2 years when stored at 2-30°C

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Group A Streptococcus Positive Swab (M1) <i>Low Level</i>	PT-S-70-M1	VP-S-70-M1	RED-S-70-M1 ¹	MDx
Group A Streptococcus Positive Swab (M2) <i>Medium Level</i>	PT-S-70-M2	VP-S-70-M2	RED-S-70-M2 ¹	MDx
Group A Streptococcus Positive Swab <i>High Level</i>	PT-S-70-01	VP-S-70-01	RED-S-70-01 ¹	Immuno
Negative-Target Products				
SARS-CoV-2 Negative Swab (IVD) ² NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	RED-S-99-M4	MDx
Respiratory Negative Swab (IVD) Negative Swab (RUO)	PT-S-99-01	VP-S-99-01	RED-S-99-01	Immuno

¹ Products are only for sale in Canada and the United States

² Products are formulated with human cells desiccated on a swab and can be used in the context of GAS testing

PANEL 4: HPV Panel



HPV Liquid QAPs™

- » Stable for 2 years when stored at 2-8°C; 1.0 mL volume
- » Prepared in HOLOGIC® ThinPrep® PreservCyt®
- » Dedicated low risk/non-oncogenic HPV 67 Positive sample to evaluate test specificity and rule out cross-reactivity
- » Formulated with inactivated whole-genome samples that contain all common assay targets (E1, E6, E7, L1), episomal and integrated viral DNA, viral RNA, proteins, and human DNA

Products	PTDx™	PROCEEDx™	REDx™	Assay Compatibility
Single-Target Products				
HPV 16 Positive Sample	PT-62-16	VP-62-16	RED-62-16	MDx
HPV 18 Positive Sample	PT-62-18	VP-62-18	RED-62-18	MDx
HPV 31 Positive Sample	PT-62-31	VP-62-31	RED-62-31	MDx
HPV 33 Positive Sample	PT-62-33	VP-62-33	RED-62-33	MDx
HPV 39 Positive Sample	PT-62-39	VP-62-39	RED-62-39	MDx
HPV 45 Positive Sample	PT-62-45	VP-62-45	RED-62-45	MDx
HPV 51 Positive Sample	PT-62-51	VP-62-51	RED-62-51	MDx
HPV 52 Positive Sample	PT-62-52	VP-62-52	RED-62-52	MDx
HPV 66 Positive Sample	PT-62-66	VP-62-66	RED-62-66	MDx
High-risk HPV Negative (HPV 67) Sample	PT-62-67	VP-62-67	RED-62-67	MDx
Multi-Target Products				
HPV 16/18/45 Positive Sample	PT-62-M1	VP-62-M1	RED-62-M1	MDx
HPV 31/33/66 Positive Sample	PT-62-M2	VP-62-M2	RED-62-M2	MDx
HPV 39/51/52 Positive Sample	PT-62-M3	VP-62-M3	RED-62-M3	MDx
Negative-Target Products				
STI Negative Sample (IVD) Negative Sample (RUO)	PT-99-M1	VP-99-M1	RED-99-M1	MDx

HPV Swab QAPs™

- » Stable for 2 years when stored at 2-30°C
- » Formulated with inactivated whole-genome samples that contain all common assay targets (E1, E6, E7, L1), episomal and integrated viral DNA, viral RNA, proteins, and human DNA

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
HPV 16 Positive Swab	PT-S-62-16	VP-S-62-16	Coming soon	MDx
HPV 18 Positive Swab	PT-S-62-18	VP-S-62-18	Coming soon	MDx
HPV 45 Positive Swab	PT-S-62-45	VP-S-62-45	Coming soon	MDx
Multi-Target Products				
HPV 16/18/45 Positive Swab	PT-S-62-M1	VP-S-62-M1	Coming soon	MDx
HPV 31/33/66 Positive Swab	PT-S-62-M2	VP-S-62-M2	Coming soon	MDx
HPV 39/51/52 Positive Swab	PT-S-62-M3	VP-S-62-M3	Coming soon	MDx
Negative-Target Products				
NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	Coming soon	MDx

PANEL 5:

Genital Ulcer Disease Panel



Genital Ulcer Disease Swab QAPs™

» Stable for up to 2 years when stored at 2-30°C

Products	PTDx™	PROCEEDx™ FLOQ®	REDx™ FLOQ®	Assay Compatibility
Single-Target Products				
HSV 1 Positive Swab	PT-S-02-01	VP-S-02-01	RED-S-02-01 ¹	MDx
HSV 1 Positive Swab (Low Level)	PT-S-02-L1	VP-S-02-L1	–	MDx
HSV 2 Positive Swab	PT-S-23-01	VP-S-23-01	RED-S-23-01 ¹	MDx
HSV 2 Positive Swab (Low Level)	PT-S-23-L1	VP-S-23-L1	–	MDx
<i>T. pallidum</i> Positive Swab	PT-S-80-01	VP-S-80-01	RED-S-80-01 ¹	MDx
<i>T. pallidum</i> 47kDa Positive Swab	PT-S-80-02	VP-S-80-02	–	MDx
Varicella Zoster Virus Positive Swab	PT-S-03-01	VP-S-03-01	RED-S-03-01 ¹	MDx
Varicella Zoster Virus Positive Swab (Low Level)	PT-S-03-L1	VP-S-03-L1	–	MDx
Monkeypox West African Positive Swab	PT-S-81-02	VP-S-81-02	Coming soon	MDx
Multi-Target Products				
HSV 1 and HSV 2 Positive Swab	PT-S-02-M2	VP-S-02-M2	RED-S-02-M2 ¹	MDx
HSV 1 and VZV Positive Swab	PT-S-02-M3	VP-S-02-M3	RED-S-02-M3 ¹	MDx
HSV 1 and <i>T. pallidum</i> Positive Swab	PT-S-02-M4	VP-S-02-M4	RED-S-02-M4 ¹	MDx
HSV 2 and VZV Positive Swab	PT-S-23-M2	VP-S-23-M2	RED-S-23-M2 ¹	MDx
HSV 2 and <i>T. pallidum</i> Positive Swab	PT-S-23-M3	VP-S-23-M3	RED-S-23-M3 ¹	MDx
<i>T. pallidum</i> and VZV Positive Swab	PT-S-80-M2	VP-S-80-M2	RED-S-80-M2 ¹	MDx
HSV1/HSV2/VZV Positive Swab	PT-S-02-M5	VP-S-02-M5	RED-S-02-M5 ¹	MDx
HSV1&2/VZV/ <i>T. pallidum</i> Positive Swab	PT-S-03-M1	VP-S-03-M1	RED-S-03-M1	MDx
Negative-Target Products				
SARS-CoV-2 Negative Swab (IVD) ² NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	RED-S-99-M4	MDx

¹Products are only for sale in Canada and the United States ²Products are formulated with human cells desiccated on a swab and can be used in the context of Genital Ulcer Disease testing

Genital Ulcer Disease Liquid QAPs™

» Stable for 2 years when stored at 2-8°C; 1mL volume

Products	PTDx™	PROCEEDx™	REDx™	Assay Compatibility
Single-Target Products				
HSV 1 Positive Sample	PT-02-M1	VP-02-M1	RED-02-M1 ²	MDx, Immuno ¹
HSV 2 Positive Sample	PT-23-M1	VP-23-M1	RED-23-M1 ²	MDx, Immuno ¹
Multi-Target Products				
HSV 1 and HSV 2 Positive	PT-02-M2	VP-02-M2	–	MDx, Immuno ¹
Negative-Target Products				
STI Negative	PT-99-M1	VP-99-M1	RED-99-M1	MDx

¹Products are QC-released with molecular assays but are also compatible with immunoassays ²Products are only for sale in Canada and the United States

PANEL 6: STI Panel



STI Swab QAPs™

» Stable for 2 years when stored at 2-30°C

Products	PTDx™	PROCEEDx™ FLOQ®	REDx™ FLOQ®	Assay Compatibility
Single-Target Products				
<i>Chlamydia trachomatis</i> Positive Swab	PT-S-12-M1	VP-S-12-M1	RED-S-12-M1 ¹	MDx
<i>Neisseria gonorrhoeae</i> Positive Swab	PT-S-17-M1	VP-S-17-M1	RED-S-17-M1 ¹	MDx
<i>Trichomonas vaginalis</i> Positive Swab	PT-S-61-M1	VP-S-61-M1	RED-S-61-M1 ¹	MDx
<i>Mycoplasma genitalium</i> Positive Swab	PT-S-63-M1	VP-S-63-M1	RED-S-63-M1 ¹	MDx
<i>M. genitalium</i> A2059G Positive Swab	PT-S-63-02	VP-S-63-02	RED-S-63-02	MDx
<i>M. genitalium</i> A2058G Positive Swab	PT-S-63-03	VP-S-63-03	RED-S-63-03	MDx
<i>M. genitalium</i> A2059C Positive Swab	PT-S-63-04	VP-S-63-04	RED-S-63-04	MDx
<i>M. genitalium</i> A2058T Positive Swab	PT-S-63-05	VP-S-63-05	RED-S-63-05	MDx
<i>M. genitalium</i> A2058C Positive Swab	PT-S-63-06	VP-S-63-06	RED-S-63-06	MDx
Multi-Target Products				
<i>Chlamydia trachomatis</i> + <i>Neisseria gonorrhoeae</i> Positive Swab	PT-S-12-M2	VP-S-12-M2	RED-S-12-M2 ¹	MDx
<i>Trichomonas vaginalis</i> + <i>Mycoplasma genitalium</i> Positive Swab	PT-S-61-M2	VP-S-61-M2	RED-S-61-M2 ¹	MDx
CT/NG/TV Positive Swab	PT-S-12-M4	VP-S-12-M4	RED-S-12-M4 ¹	MDx
CT/NG/TV/MG Positive Swab	PT-S-12-M5	VP-S-12-M5	RED-S-12-M5 ¹	MDx
Negative-Target Products				
SARS-CoV-2 Negative Swab (IVD) ² NAAT Negative Swab (RUO)	PT-S-99-M4	VP-S-99-M4	RED-S-99-M4	MDx

¹ Products are only for sale in Canada and the United States ² Products are formulated with human cells desiccated on a swab and can be used in the context of STI testing

STI Liquid QAPs™

» Stable for up to 2 years when stored at 2-8°C; 1.0 mL volume

Products	PTDx™	PROCEEDx™	REDx™	Assay Compatibility
Single-Target Products				
<i>Chlamydia trachomatis</i> Positive Sample (MDx)	PT-12-M1	VP-12-M1	RED-12-M1 ¹	MDx
<i>Chlamydia trachomatis</i> Positive Sample	PT-12-01	VP-12-01	RED-12-01 ¹	MDx, Immuno
<i>Neisseria gonorrhoeae</i> Positive Sample	PT-17-M1	VP-17-M1	RED-17-M1 ¹	MDx
<i>Trichomonas vaginalis</i> Positive Sample	PT-61-01	VP-61-01	RED-61-01 ¹	MDx, Immuno
<i>Mycoplasma genitalium</i> Positive Sample	PT-63-01	VP-63-01	RED-63-01	MDx
Multi-Target Products				
<i>Chlamydia trachomatis</i> + <i>Neisseria gonorrhoeae</i> Positive Sample	PT-12-M2	VP-12-M2	RED-12-M2 ¹	MDx
Negative-Target Products				
STI Negative	PT-99-M1	VP-99-M1	RED-99-M1	MDx

¹ Products are only for sale in Canada and the United States

PANEL 7: Gastrointestinal Panel



Gastrointestinal Swab QAPs™

» Stable for up to 2 years when stored at 2-30°C

BACTERIAL

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Campylobacter OMP Positive Swab	PT-S-40-01	VP-S-40-01	–	Immuno
Campylobacter jejuni Positive Swab	PT-S-123-01	VP-S-123-01	Coming soon	MDx
C.difficile GDH Positive Swab	PT-S-39-01	VP-S-39-01	–	Immuno
C.difficile GDH/Toxin A/ Toxin B Positive Swab	PT-S-39-02	VP-S-39-02	–	Immuno
Clostridium difficile Positive Swab	–	VP-S-125-01	Coming soon	MDx
H. pylori Positive Swab	PT-S-27-01	VP-S-27-01	Coming soon	Immuno
Salmonella enteritidis Positive Swab	PT-S-126-01	VP-S-126-01	Coming soon	MDx
Shiga toxin-producing E. coli Positive Swab	PT-S-127-01	VP-S-127-01	Coming soon	MDx
Shigella sonnei Positive Swab	PT-S-121-01	VP-S-121-01	Coming soon	MDx
Enterotoxigenic E. coli Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Plesiomonas shigelloides Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Vibrio parahaemolyticus Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Yersinia enterocolitica Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Multi-Target Products				
C.difficile GDH/Toxin A/ Toxin B Positive Swab	PT-S-39-02	VP-S-39-02	–	Immuno
Enteric Bacterial Panel 1 Positive Swab ¹	PT-S-120-M1	VP-S-120-M1	Coming soon	MDx
Enteric Bacterial Panel 2 Positive Swab ²	Coming soon	Coming soon	Coming soon	MDx
Negative-Target Products				
NAAT Negative Swab (RUO) ³	PT-S-99-M4	VP-S-99-M4	–	MDx
Negative Swab (RUO)	PT-S-99-01	VP-S-99-01	–	MDx, Immuno

¹Product is formulated with inactivated Shigella sonnei, Campylobacter jejuni, Salmonella enteritidis, and STEC.

²Product is formulated with inactivated Vibrio parahaemolyticus· Yersenia enterocolitica· ETEC· and Plesiomonas shigelloides.

³Products are formulated with human cells desiccated on a swab and can be used in the context of enteric bacterial testing.

PANEL 7:
Gastrointestinal Panel



Gastrointestinal Swab QAPs™

» Stable for up to 2 years when stored at 2-30°C

VIRAL

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Adenovirus F40/41 Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Astrovirus Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Norovirus GI Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Norovirus GII Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Rotavirus Positive Swab (MDx)	Coming soon	Coming soon	Coming soon	MDx
Sapovirus Positive Swab	Coming soon	Coming soon	Coming soon	MDx
Multi-Target Products				
Enteric Viral Panel Positive Swab ¹	Coming soon	Coming soon	Coming soon	MDx
Negative-Target Products				
NAAT Negative Swab (RUO) ²	PT-S-99-M4	VP-S-99-M4	-	MDx

¹Product is formulated with inactivated Sapovirus, Astrovirus, Norovirus GII, Rotavirus, and Adenovirus.

²Products are formulated with human cells desiccated on a swab and can be used in the context of enteric viral testing.

PANEL 7:

Gastrointestinal Panel



Gastrointestinal Liquid QAPs™

» Stable for 1 year when stored at 2-8°C; 1.0 mL volume

BACTERIAL

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Campylobacter jejuni Positive Sample	PT-123-01	VP-123-01	Coming soon	MDx
Clostridium difficile Positive Sample	-	VP-125-01	Coming soon	MDx
Salmonella enteritidis Positive Sample	PT-126-01	VP-126-01	Coming soon	MDx
Shiga toxin-producing E. coli Positive Sample	PT-127-01	VP-127-01	Coming soon	MDx
Shigella sonnei Positive Sample	PT-121-01	VP-121-01	Coming soon	MDx
Enterotoxigenic E. coli Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Plesiomonas shigelloides Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Vibrio parahaemolyticus Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Yersinia enterocolitica Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Multi-Target Products				
Enteric Bacterial Panel 1 Positive Sample ¹	PT-120-M1	VP-120-M1	Coming soon	MDx
Enteric Bacterial Panel 2 Positive Sample ²	Coming soon	Coming soon	Coming soon	MDx
Negative-Target Products				
Negative Sample	PT-99-01	VP-99-01	-	MDx

¹Product is formulated with inactivated Shigella sonnei, Campylobacter jejuni, Salmonella enteritidis, and STEC.

²Product is formulated with inactivated Vibrio parahaemolyticus, Yersenia enterocolitica, ETEC, and Plesiomonas shigelloides.

PANEL 7: Gastrointestinal Panel



Gastrointestinal Liquid QAPs™

» Stable for 1 year when stored at 2-8°C; 1.0 mL volume

VIRAL

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Rotavirus Positive Sample	PT-35-01	VP-35-01	RED-35-01 ²	MDx
Adenovirus F40/41 Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Astrovirus Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Norovirus GI Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Norovirus GII Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Rotavirus Positive Sample (MDx)	Coming soon	Coming soon	Coming soon	MDx
Sapovirus Positive Sample	Coming soon	Coming soon	Coming soon	MDx
Multi-Target Products				
Enteric Viral Panel Positive Sample ¹	Coming soon	Coming soon	Coming soon	MDx
Negative-Target Products				
Negative Sample	PT-99-01	VP-99-01	-	Immuno, MDx

¹Product is formulated with inactivated Sapovirus, Astrovirus, Norovirus GII, Rotavirus, and Adenovirus.

²REDx™ products are only for sale in Canada and the United States.

PARASITE

» Stable for 1+ years when stored at 2-8°C; 0.5mL volume

Products	PTDx™	PROCEEDx™FLOQ®	REDx™FLOQ®	Assay Compatibility
Single-Target Products				
Cryptosporidium parvum Positive Sample	PT-37-01	VP-37-01	RED-37-01 ¹	MDx ² , Immuno
Giardia lamblia Positive Sample	PT-38-01	VP-38-01	RED-38-01 ¹	MDx ² , Immuno
Multi-Target Products				
Cryptosporidium parvum + Giardia lamblia Positive Sample	PT-37-02	VP-37-02	RED-37-02 ¹	MDx ² , Immuno
Negative-Target Products				
Negative Sample	PT-99-01	VP-99-01	-	MDx

¹REDx™ products are only for sale in Canada and the United States.

²Products are QC-released with immunoassays but are also compatible with molecular assays.

PANEL 8:
Vaginal Infection Panel



» Stable for 2 years when stored at 2-30°C

Products	PTD ^x TM	PROCEED ^x TM FLOQ [®]	RED ^x TM FLOQ [®]	Assay Compatibility
Multi-Target Products				
Candida albicans/Candida glabrata/ Candida krusei Positive Swab	–	VP-S-102-M2	Coming soon	MDx
Bacterial Vaginosis Panel Positive Swab ¹	–	VP-S-105-M1	Coming soon	MDx
Negative-Target Products				
NAAT Negative Swab (RUO) ²	PT-S-99-M4	VP-S-99-M4	–	MDx

¹ Product is formulated with inactivated Gardnerella vaginalis, Atopobium vaginae, Megasphaera 1, BVAB2, Lactobacillus crispatus, Lactobacillus jensenii, Trichomonas vaginalis, and human cells

²Products are formulated with human cells desiccated on a swab and can be used in the context of vaginal infection testing

Kit Catalogue Number	Kit Components ONBOARDx™ kit	Assay Compatibility
Respiratory ONBOARDx™ Kits		
ONBOARDx™FLOQ® SARS-COV-2 Swab Kit (RUO) VP-SK-COV2-01	PROCEEDx™ FLOQ® SARS-COV-2 Positive swab x8 PROCEEDx™ FLOQ® NAAT Negative Swab x4	MDx
ONBOARDx™FLOQ® RVP Swab Kit (RUO) VP-SK-RVP-01	PROCEEDx™FLOQ® SARS-CoV-2/Flu A&B/RSV Positive swab x8 PROCEEDx™ FLOQ® Negative swab x16	MDx
ONBOARDx™FLOQ® SARS-CoV-2 Variant Swab Kit (RUO) VP-SK-CVAR-01	PROCEEDx™ FLOQ® SARS-COV-2 B.1.1.7 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 B.1.351 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 P.1 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 Positive swab x3	MDx
ONBOARDx™FLOQ® SARS-CoV-2 Variant Swab Kit (RUO) VP-SK-CVAR-02	PROCEEDx™ FLOQ® SARS-COV-2 B.1.1.7 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 B.1.351 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 P.1 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 B.1.617 Positive swab x3 PROCEEDx™ FLOQ® SARS-COV-2 Positive swab x3	MDx
ONBOARDx™FLOQ® Respiratory Swab Kit (RUO) VP-SK-RESP-01	PROCEEDx™ FLOQ® SARS-CoV-2 Positive swab x3 PROCEEDx™ FLOQ® Influenza A Positive swab x3 PROCEEDx™ FLOQ® Influenza B Positive swab x3 PROCEEDx™ FLOQ® RSV Positive swab x3	MDx
ONBOARDx™FLOQ® Respiratory Swab Kit (RUO) VP-SK-RESP-02	PROCEEDx™FLOQ® Respiratory SARS-CoV-2 Positive swab x15 PROCEEDx™FLOQ® Respiratory NAAT RSV Positive swab x15 PROCEEDx™FLOQ® Respiratory NAAT Influenza A Positive swab x15 PROCEEDx™FLOQ® Respiratory NAAT Influenza B Positive swab x15	MDx
ONBOARDx™FLOQ® RVP Swab Kit (RUO) VP-SK-RVP-02	PROCEEDx™FLOQ® Respiratory NAAT SARS-CoV-2 Positive swab x5 (Ultra Low) PROCEEDx™FLOQ® Respiratory NAAT RSV Positive swab x5 (Ultra Low) PROCEEDx™FLOQ® Respiratory NAAT Influenza A Positive swab x5 (Ultra Low) PROCEEDx™FLOQ® Respiratory NAAT Influenza B Positive swab x5 (Ultra Low) PROCEEDx™FLOQ® NAAT Swab Negative Sample x4	MDx
ONBOARDx™FLOQ® SARS-CoV-2 Antigen Swab Kit (RUO) VP-SK-COV2AG-01	PROCEEDx™ FLOQ® SARS-COV-2 Antigen Positive swab x10 PROCEEDx™ FLOQ® Negative swab x2	Immuno
ONBOARDx™FLOQ® SARS-CoV-2 Antigen Swab Kit (RUO) VP-SK-COV2AG-02	PROCEEDx™ FLOQ® SARS-COV-2 Antigen Positive swab x15 PROCEEDx™ FLOQ® Negative swab x5	Immuno

Respiratory ONBOARDx™ Kits continued on following page »

PANEL 9:
ONBOARDx™ Kits



Kit Catalogue Number	Kit Components ONBOARDx™ kit	Assay Compatibility
Respiratory ONBOARDx™ Kits (continued)		
ONBOARDx™FLOQ® Respiratory Swab Kit (RUO) VP-SK-RESPAG-02	PROCEEDx™FLOQ® SARS-CoV-2 Antigen Positive swab x5 PROCEEDx™FLOQ® Influenza A Positive swab x5 PROCEEDx™FLOQ® Influenza B Positive swab x5 PROCEEDx™ FLOQ® RSV Positive swab x5	Immuno
ONBOARDx™FLOQ® RSV Swab Kit (RUO) VP-SK-RSV-01	PROCEEDx™FLOQ® RSV Positive swab x10 PROCEEDx™FLOQ® Negative swab x2	MDx, Immuno
ONBOARDx™FLOQ® RSV Swab Kit (RUO) VP-SK-RSV-02	PROCEEDx™FLOQ® RSV Positive swab x20 PROCEEDx™FLOQ® Negative swab x4	MDx, Immuno
ONBOARDx™FLOQ® FLU Swab Kit (RUO) VP-SK-FLU-01	PROCEEDx™FLOQ® Influenza A Positive swab x5 PROCEEDx™FLOQ® Influenza B Positive swab x5 PROCEEDx™ FLOQ® Negative swab x2	MDx, Immuno
ONBOARDx™FLOQ® FLU Swab Kit (RUO) VP-SK-FLU-02	PROCEEDx™FLOQ® Influenza A Positive swab x10 PROCEEDx™FLOQ® Influenza B Positive swab x10 PROCEEDx™ FLOQ® Negative swab x4	MDx, Immuno
ONBOARDx™ SARS-CoV-2 Kit (RUO) VP-K-COV2-01	PROCEEDx™ SARS-CoV-2 Positive (0.5mL) vial x8 PROCEEDx™ SARS-CoV-2 Negative (0.5mL) vial x4	MDx
ONBOARDx™ Respiratory Kit (RUO) VP-K-RESP-01	PROCEEDx™ SARS-CoV-2 Positive (0.5mL) vial x3 PROCEEDx™ Influenza A Positive (1 mL) vial x3 PROCEEDx™ Influenza B Positive (1 mL) vial x3 PROCEEDx™ RSV Positive (1 mL) vial x3	MDx

PANEL 9:
ONBOARDx™ Kits



Products	Kit Components ONBOARDx™ kit	Assay Compatibility
HPV ONBOARDx™ Kits		
ONBOARDx™ High-Risk HPV Kit (RUO) VP-K-HPV-02	PROCEEDx™ HPV16/18/45 Positive Sample (1mL) Vial x3 PROCEEDx™ HPV 31/33/66 Positive Sample (1mL) Vial x3 PROCEEDx™ HPV 39/51/52 Positive Sample (1mL) Vial x3	MDx
ONBOARDx™ High-Risk HPV Positive Sample Kit (RUO) VP-K-HPV-06	PROCEEDx™ HPV 16 Positive Sample (1mL) Vial x1 PROCEEDx™ HPV 31 Positive Sample (1mL) Vial x1	MDx
ONBOARDx™ High-Risk HPV Positive Sample Kit (RUO) VP-K-HPV-05	PROCEEDx™ HPV 16/18/45 Positive Sample (1mL) Vial x6 PROCEEDx™ HPV 31/33/66 Positive Sample (1mL) Vial x6 PROCEEDx™ HPV 39/51/52 Positive Sample (1mL) Vial x6	MDx
ONBOARDx™ HPV Positive Sample Kit (RUO) VP-K-HPV-04	PROCEEDx™ HPV 16 Positive Sample (1mL) Vial x3 PROCEEDx™ HPV 18 Positive Sample (1mL) Vial x3 PROCEEDx™ HPV 45 Positive Sample (1mL) Vial x3 PROCEEDx™ HPV Negative Sample (1mL) Vial x3	MDx
Genital Ulcer Disease ONBOARDx™ Kits		
ONBOARDx™ FLOQ® Genital Ulcer Panel Swab Kit (RUO) VP-SK-HVT-01	PROCEEDx™FLOQ® HSV1 Positive swab (Low Level) x5 PROCEEDx™FLOQ® HSV2 Positive swab (Low Level) x5 PROCEEDx™FLOQ® VZV Positive swab (Low Level) x5 PROCEEDx™FLOQ® <i>Treponema pallidum</i> 47 KDa Positive swab x5 (Low Level) PROCEEDx™FLOQ® NAAT Negative swab (Low Level) x4	MDx, Immuno
Gastrointestinal ONBOARDx™ Kits		
ONBOARDx™ FLOQ® Campylobacter Panel Swab Kit (RUO) VP-SK-GI-03	PROCEEDx™FLOQ® <i>Campylobacter</i> OMP Positive swab x12 PROCEEDx™FLOQ® Negative swab x12	Immuno
ONBOARDx™ FLOQ® <i>C. difficile</i> Panel Swab Kit (RUO) VP-SK-GI-02	PROCEEDx™FLOQ® <i>C. difficile</i> GDH Positive swab x8 PROCEEDx™FLOQ® <i>C. difficile</i> GDH/Toxin A/Toxin B Positive swab x8 PROCEEDx™FLOQ® Negative swab x8	Immuno

PANEL 9:
ONBOARDx™ Kits



Products	Kit Components ONBOARDx™ kit	Assay Compatibility
ONBOARDx™FLOQ® Vaginal Infection Panel Swab Kit VP-SK-BVV-01	PROCEEDx™FLOQ® Candida Panel Swab Positive Sample x12 PROCEEDx™FLOQ® Bacterial Vaginosis Panel Swab Positive Sample x12	MDx
ONBOARDx™ Enteric Bacterial Panel 1 Kit VP-K-GIB-01	PROCEEDx™ Enteric Bacterial Panel 1 Positive Sample x5	MDx
ONBOARDx™FLOQ® Enteric Bacterial Panel 1 Swab Kit VP-SK-GIB-01	PROCEEDx™ Enteric Bacterial Panel 1 Swab Positive Sample x12	MDx
ONBOARDx™ C.difficile Positive Sample Kit VP-K-GIB-02	PROCEEDx™ Clostridium difficile Positive Sample x5	MDx