# Proficiency Testing and External Quality Assessment Materials for use with BIOFIRE® FILMARRAY® and BIOFIRE® SPOTFIRE® Panels

#### Introduction

This document provides a listing of proficiency testing and external quality assessment materials that have been tested at bioMérieux and are compatible with the BIOFIRE® Panels indicated. All proficiency testing and external quality assessment programs listed are monitored at bioMérieux. The information in this document is meant to be a quideline and may not be inclusive.

#### Resources

The laboratory director is responsible for determining the appropriate proficiency tests or external quality assessment programs for each laboratory. Proficiency testing (PT) and external quality assessment (EQA) requirements can be complicated and are based upon the analytes tested, methods utilized, and specialty/subspecialty categories and requirements will vary by region.

For laboratories operating in accordance with CLIA guidelines; the best way to ensure compliance is to develop your proficiency testing plan in coordination with CLIA or the College of American Pathologists (CAP) or the regulatory body governing your laboratory. Laboratories in other regions should refer to guidelines set by the regulatory body governing your laboratory for more information.

Contact the PT/EQA Provider for more information on program availability in your laboratory's region.

Department of Health and Human Services, Centers for Medicare & Medicaid Services CLIA Brochure #8. Proficiency Testing and PT Referral, Dos and Don'ts. September 2017. https://www.cms.gov/regulations-and-guidance/legislation/clia/downloads/cliabrochure8.pdf

#### American Proficiency Institute (API)

Website:www.api-pt.com

Phone: 800-333-0958 (M-F 8:00 AM – 4:00 PM EST)
API Catalog: https://api-pt.com/catalog-ordering-information

#### College of American Pathologists (CAP)

Website: https://www.cap.org/laboratory-improvement/proficiency-testing

Phone: 800-323-4040 (M-F 7:00 AM - 5:30 PM CST)

CAP Proficiency Testing Catalog: https://www.cap.org/laboratory-improvement/catalogs-ordering-and-shipping

CAP Proficiency Testing Manual: https://www.cap.org/laboratory-improvement/proficiency-

testing?\_adf.ctrltate=ni2atkwi7\_25&\_afrLoop=231986540573538#!



#### INSTAND e.V.

Website: https://www.instand-ev.de/en/ Phone: +49 (0) 211 1592 13-0

Catalog: https://www.instand-ev.de/fileadmin/user\_upload/INSTAND-Katalog\_2025\_EN.pdf

#### LabQuality

Website: https://www.labquality.com/

Phone: +358 9 8566 8200 (weekdays from 8:30–16:00 (EET))

Catalog: https://www.labquality.com/external-quality-assessment/eqa-program

#### Association for Medical Quality control (MQZH)

Website: https://www.mqzh.ch/cm/en/

Phone: +41 44 255 34 11

Catalog: https://www.mqzh.ch/cm/fr/katalog-fr.html

#### **Quality Control for Molecular Diagnostics (QCMD)**

Website: https://www.gcmd.org/en/

Phone: +44 (0)141 945 6474 (Monday – Friday 9:00 AM – 5:00 PM (UK Time))

Catalog: https://www.qcmd.org/en/qcmd\_eqa\_schemes/

#### **UK NEQAS**

Website: https://ukneqasmicro.org.uk/ Phone: + 44 (0)208 905 9890

Catalog: https://uknegasmicro.org.uk/schemes/uk-negas-microbiology-ega-schemes/

#### Wisconsin State Laboratory of Hygiene (WSLH)

Website: https://wslhpt.org/

Phone: 800-462-5261 (M-F 8:00 AM to 4:30 PM (CST)

Catalog: https://wslhpt.org/proficiency-testing-programs-for-clinical-laboratories/

WSLH is available only in the US.

#### **Proficiency Testing/ External Quality Assessment Monitoring Guide 2025**

Proficiency Testing (PT) and External Quality Assessment (EQA) specimens should be handled like a patient specimen and tested using routine methods. Laboratories should follow instructions provided by the PT/EQA provider for specific handling instructions, such as rehydration. Media should not be added to samples and samples should not be pooled unless directed by the PT/EQA provider. Liquid samples should be mixed prior to testing.

**NOTE:** PT/EQA requirements vary by region. Refer to guidelines set by the regulatory body governing your laboratory for more information. Contact the PT/EQA Provider for more information on program availability in your laboratory's region.





### BIOFIRE® FILMARRAY® Blood Culture Identification 2 (BCID2) Panel

Table 1. Proficiency Testing/EQA Materials for BIOFIRE® BCID2 Panel

BIOFIRE BCID2 Panel								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes		
API	Blood Pathogen Panel for Molecular Multiplex Users	368	Complete coverage of all analytes on panel	5 x 1.0 mL simulated positive blood culture fluid specimens	3	Preferred panel for complete coverage		
САР	Bacterial Blood Culture, Molecular	ВСМ	Bacteria and resistance mechanisms on BIOFIRE BCID2	5 x 1.0 mL simulated positive blood culture fluid specimens	3	BCM and YBC provide		
САР	Yeast Blood Culture, Molecular	YBC	Fungal organisms on BIOFIRE BCID2	5 x 1.0 mL simulated positive blood culture fluid specimens	3	complete coverage		
WSLH	Blood Pathogen Multiplex (BPM)	PT0548 1	Complete coverage of all analytes on panel	2 x 1.0 mL simulated stool specimens	3	Provides complete coverage		



**Table 2.** Proficiency Testing/ EQA Materials for BIOFIRE® FILMARRAY® Gastrointestinal (GI) Panel and BIOFIRE® FILMARRAY® Gastrointestinal (GI) Panel Mid

BIOFIRE FILMARRAY GI Panel and GI Panel Mid								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes		
API	Gastrointestinal Panel for Molecular Multiplex Users	369	Complete coverage of all analytes on panel	5 x 1.0 mL simulated stool specimens	3	Preferred panel for complete coverage		
САР	Gastrointestinal Panel for Molecular Multiplex Testing	GIP5	Complete coverage of all analytes on panel	5 x 1.0 mL simulated stool specimens	3	Preferred panel for complete coverage; available in the US only		



	1					
САР	Gastrointestinal Panel, Global	GIPN	Covers most targets on BIOFIRE GI Panel	5 x 1.0 mL simulated stool specimens	3	Partial coverage; available outside US only
INSTAND	Gastrointestinal Virus Panel for Multiplex Tests	430	Covers on- panel Viruses only	3 lyophilized samples (faecal or cell culture lysates)	2	Partial coverage
	Gastrointestinal viral multiplex	5304	Covers on- panel Viruses only	3 x 1.0 mL simulated samples	2	5304 + 5472 +5191 provides complete coverage
LabQuality	Faecal parasites multiplex	5472	Covers on- panel parasites only	3 lyophilized samples	4	
	Faecal bacterial pathogens multiplex	5191	Covers on- panel bacteria only	3 lyophilized samples (simulated or bacterial)	4	
MQZH	BIOFIRE/ Filmarray Gastrointestinal Panel	B18	Complete coverage of all analytes on panel	1 liquid sample	4	Preferred panel for complete coverage
	Diarrheagenic Escherichia coli	QAB154 179	Covers all the Diarrheagenic E. coli / Shigella	8 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
OCMD	Bacterial Gastroenteritis	QAB124 153	Incomplete coverage of on- panel bacteria	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
QCMD	Parasitic Gastroenteritis	QAP124 154	Incomplete coverage of on-panel parasites	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
	Viral Gastroenteritis	QAV124 152	Complete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
UK NEQAS	Viral gastroenteritis	-	Incomplete coverage of onpanel viruses	4 x freeze dried human faeces	2	Partial coverage
WSLH	Gl Multiplex	PT0538 0	Complete coverage of all analytes on panel	5 x 1.0 mL simulated stool specimens	3	Provides complete coverage

**NOTE:** The API Gastrointestinal Panel, the CAP GIP5, and the WSLH GI Multiplex Panel meet CMS requirements for bacteriology/virology identification.





### **BIOFIRE® Joint Infection Panel**

Table 3. Proficiency Testing/EQA Materials for BIOFIRE® Joint Infection Panel

BIOFIRE Joir	BIOFIRE Joint Infection Panel								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes			
API	Joint Infection/Wound Infection Panel	390	Complete coverage of all analytes on panel except Clostridium perfringens	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except C. perfringens			
CAP	Joint Infection Panel	JIP	Complete coverage of all analytes on panel except Clostridium perfringens	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except C. perfringens			
QCMD	Joint Infection Panel	QAM24 4227	Candida albicans, Enterococcus faecalis, Escherichia coli, Staphylococcus aureus (MSSA, MRSA), Pseudomonas aeruginosa, Streptococcus agalactiae, S. pyogenes	10 x 1.0 mL cultured and/or clinical material	1	Partial coverage			



### BIOFIRE® FILMARRAY® Meningitis/Encephalitis (ME) Panel

Table 4. Proficiency Testing/ EQA Materials for BIOFIRE® FILMARRAY® Meningitis/Encephalitis (ME) Panel

BIOFIRE FILMARRAY ME Panel								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes		
API	ME Panel for Molecular Multiplex Users	371	Complete coverage of all analytes on panel	5 x 1.0 mL simulated CNS specimens	3	Preferred panel for complete coverage		
САР	ME Panel for Molecular Multiplex Users	IDM5	Complete coverage of all analytes on panel	5 x 1.0 mL simulated CNS specimens	3	Preferred panel for complete coverage		



LabQuality	Meningitis- encephalitis multiplex	5303	Complete coverage of all analytes on panel	3 x 1.0 mL simulated samples	4	Preferred panel for complete coverage
MQZH	BIOFIRE/Filmar ray Meningitis Panel	B23	Complete coverage of all analytes on panel	1 liquid sample	4	Preferred panel for complete coverage
INSTAND	Viral Meningitis / Encephalitis for Multiplex Tests	433	Complete coverage of on- panel viruses	4 lyophilized samples (cell culture lysates)	2	Covers on- panel Viruses only
	Central Nervous System I (Viral Meningitis and Encephalitis)	QAV174 195	Incomplete coverage of on- panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
QCMD	Central Nervous System II (Non- Viral Meningitis and Encephalitis)	QAM17 4196	Complete coverage of on- panel bacteria/fungi	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
WSLH	Meningitis Multiplex	PT0545 1	Complete coverage of all analytes on panel	2 lyophilized specimens	3	Provides complete coverage

**NOTE:** The API ME Panel, the CAP IDM5, and the WSLH Meningitis Multiplex meet CMS requirements for bacteriology/virology identification.



### BIOFIRE® FILMARRAY® Pneumonia (PN) Panel and BIOFIRE® FILMARRAY® Pneumonia Panel*plus*

**Table 5.** Proficiency Testing/ EQA Materials for BIOFIRE® FILMARRAY® Pneumonia (PN) and Pneumonia plus Panels

BIOFIRE PN and Pneumonia <i>plus</i> Panels								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes		
API	Pneumonia Panel for Molecular Multiplex users	378	Complete coverage of all analytes on Pneumonia panel*	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except MERS-CoV on Pneumonia Panel plus		
САР	Infectious Disease Pneumonia Panel for Molecular Multiplex Testing	IDPN	Complete coverage of all analytes on Pneumonia panel*	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except MERS-CoV on Pneumonia Panel plus		

<sup>\*</sup> API and CAP surveys do not include MERS-CoV challenges.





BIOFIRE® Respiratory Panels- Including Respiratory Panel 2.1 (RP2.1), Respiratory Panel 2.1*plus* (RP2.1*plus*), and Respiratory Panel 2.1-EZ (RP2.1- EZ) (EUA)\* and BIOFIRE® SPOTFIRE® Panels including the BIOFIRE® SPOTFIRE® Respiratory (R) Panel, Respiratory (R) Panel Mini, Respiratory/Sore Throat (R/ST) Panel, and Respiratory/Sore Throat (R/ST) Panel Mini

Table 6. Proficiency Testing/ EQA Materials for BIOFIRE® RP2.1, RP2.1plus, and RP2.1-EZ (EUA)\*

BIOFIRE RP2.1, RP2.1 <i>plus</i> , and RP2.1-EZ (EUA)*								
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes		
API	Respiratory Panel for Molecular Multiplex Users	370	Complete coverage of all analytes on RP2.1/RP2.1- EZ panel	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except MERS-CoV on RP2.1plus		
CAP	Infectious Disease Respiratory Panel for Molecular Multiplex Testing	IDR	Complete coverage of all analytes on RP2.1/RP2.1- EZ panel	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except MERS-CoV on RP2.1plus		
INSTAND	Respiratory virus panel 1 for multiplex tests	431	Complete coverage of on- panel viruses on RP2.1	4 lyophilized samples (cell culture lysates)	2	Partial coverage		
INSTAND	Respiratory virus panel 2 for multiplex tests	432	Incomplete coverage of on-panel viruses	4 lyophilized samples (cell culture lysates)	2	Partial coverage		
LabQuality	Respiratory infections multiplex	5300	Complete coverage of all analytes on RP2.1	4 x 1.0 mL simulated samples	4	Provides coverage for all targets except MERS-CoV on RP2.1plus		
MQZH	Respiratory Panel	B19	Complete coverage of all analytes on RP2.1	1 liquid sample	4	Provides coverage for all targets except MERS-CoV on RP2.1plus		
	Respiratory I	QAV164 188	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		
QCMD	Respiratory I plus	QAM20 4216	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		
	Respiratory II	QAV164 189	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		



QCMD	Respiratory III	QAM17 4193	Incomplete coverage of on- panel bacteria	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
	MERS Coronavirus	QAV154 181	MERS-CoV only	8 x 1.0 mL cultured and/or clinical material	1	MERS-CoV only
UK NEQAS	Molecular Detection of Respiratory Viruses	-	Complete coverage of on- panel viruses	4 x freeze dried simulated nasopharynge al aspirates or throat swab samples	3	Partial coverage
WSLH	Respiratory Multiplex	PT0624 0	Complete coverage of all analytes on RP2.1/RP2.1- EZ panel	5 x 1.0 mL liquid specimens	3	Provides coverage for all targets except MERS-CoV on RP2.1 plus

**NOTE:** MERS Coronavirus is only available through the QCMD MERS25 survey.

**Table 7.** Proficiency Testing/EQA Materials for BIOFIRE® SPOTFIRE® Respiratory (R) Panel and Respiratory (R) Panel Mini

SPOTFIRE R Panel and R Panel Mini								
Vendor	Survey Name	Part Number	SPOTFIRE® Coverage	Format	Shipments / year	Notes		
API	Respiratory Panel for Molecular Multiplex Users	370	Complete coverage of all analytes on panel	5 x 1.0 mL liquid specimens	3	Preferred panel for complete coverage		
САР	Infectious Disease Respiratory Panel for Molecular Multiplex Testing	IDR	Complete coverage of all analytes on panel	5 x 1.0 mL liquid specimens	3	Preferred panel for complete coverage		
LabQuality	Respiratory infections multiplex	5300	Complete coverage of all analytes on panel	4 x 1.0 mL simulated samples	4	Preferred panel for complete coverage		
MQZH	Respiratory Panel	B19	Complete coverage of all analytes on panel	1 liquid sample	4	Provides complete coverage		
QCMD	Respiratory I	QAV164 188	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		
QUIVID	Respiratory I plus	QAM20 4216	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		



QCMD	Respiratory II	QAV164 189	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
	Respiratory III	QAM17 4193	Incomplete coverage of on- panel bacteria	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
UK NEQAS	Molecular Detection of Respiratory Viruses	-	Covers on- panel Viruses only	4 x freeze dried simulated nasopharynge al aspirates or throat swab samples	3	Partial coverage
WSLH	Respiratory Multiplex	PT0624 0	Complete coverage of all analytes on panel	5 x 1.0 mL liquid specimens	3	Provides complete coverage

**Table 8.** Proficiency Testing/ EQA Materials for BIOFIRE® SPOTFIRE® Respiratory/Sore Throat (R/ST) Panel and Respiratory/Sore Throat (R/ST) Panel Mini

SPOTFIRE R/ST Panel and R/ST Panel Mini								
Vendor	Survey Name	Part Number	SPOTFIRE® Coverage	Format	Shipments / year	Notes		
API	Respiratory Panel for Molecular Multiplex Users	370	Complete coverage of all analytes on panel	5 x 1.0 mL liquid specimens	3	Preferred panel for complete coverage of Respiratory and Sore Throat Panels		
САР	Infectious Disease Respiratory Panel for Molecular Multiplex Testing	IDR	Complete coverage of all analytes on Respiratory panel	5 x 1.0 mL liquid specimens	3	Complete coverage for Respiratory Panel only		
LabQuality	Respiratory infections multiplex	5300	Complete coverage of all analytes on Respiratory panel	4 x 1.0 mL simulated samples	4	Complete coverage for Respiratory Panel only		
	Streptococcus pyogenes	5593	Streptococcus pyogenes on Sore Throat Panel	3 simulated pharyngeal samples	4	S. pyogenes for Sore Throat Panel only		
MQZH	Respiratory Panel	B19	Complete coverage of all analytes on Respiratory panel	1 liquid sample	4	Complete coverage for Respiratory Panel only		
QCMD	Respiratory I	QAV164 188	Incomplete coverage of on- panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage		



QCMD	Respiratory I plus	QAM20 4216	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
	Respiratory II	QAV164 189	Incomplete coverage of on-panel viruses	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
	Respiratory III	QAM17 4193	Incomplete coverage of on-panel bacteria	10 x 1.0 mL cultured and/or clinical material	1 or 2	Partial coverage
UK NEQAS	Molecular Detection of Respiratory Viruses	-	Covers on- panel Viruses only	4 x freeze dried simulated nasopharynge al aspirates or throat swab samples	3	Partial coverage
WSLH	Respiratory Multiplex	PT0624 0	Complete coverage of all analytes on Respiratory panel	5 x 1.0 mL liquid specimens	3	Complete coverage for Respiratory Panel only



### BIOFIRE® FILMARRAY® Tropical Fever (TF) Panel

Table 9. Proficiency Testing/ EQA Materials for BIOFIRE® FILMARRAY® Tropical Fever (TF)Panel

BIOFIRE FILMARRAY TF Panel							
Vendor	Survey Name	Part Number	BIOFIRE® Coverage	Format	Shipments / year	Notes	
API	Global Fever Panel	395	Complete coverage of all analytes on panel	2 x 0.5 mL simulated specimens	3	Preferred panel for complete coverage	
INSTAND	Virus genome detection- Dengue	369	Dengue virus	4 x 1.5 mL samples (lyophilized plasma or cell culture lysates)	3	Partial coverage/ unable to monitor at bioMérieux	
	Virus genome detection- Chikungunya	392	Chikungunya virus	4 x 1.5 mL samples (lyophilized plasma or cell culture lysates)	3	Partial coverage	
LabQuality	Malaria, antigen and nucleic acid detection	5430	Plasmodium	3 whole blood samples	4	Partial coverage	
UK NEQAS	Malaria (Molecular)	-	Plasmodium	4 lyophilized blood samples	4	Partial coverage	



QCMD	CHIKV25	QAV154 175	Chikungunya virus	10 lyophilized samples	1	Partial coverage
	DENVRNA25	QAV114 148	Dengue virus	10 lyophilized samples	1	
	MALARIA25	QAP214 218	Malaria	10 lyophilized samples	1	

### **Technical Support Contact Information**

bioMérieux is dedicated to providing the best customer support available. If you have questions or concerns about this process, please contact your local bioMérieux representative or your authorized distributor.

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