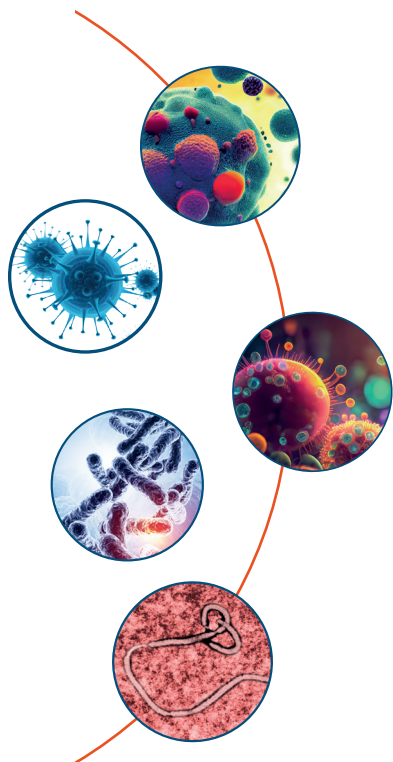


Quantabio in Public Health

Designed for Diverse Molecular Testing Applications.

Quantabio is committed to supporting molecular testing for public health applications with our ToughMix PCR, qPCR and RT-qPCR reagents. Since 2013, Quantabio products have been cited in testing protocols for viruses such as H7N9 Avian Influenza, Polio and COVID-19 and bacteria such as *Legionella spp.*, *Mycoplasma pneumoniae* and Shiga toxin-producing *E. coli*. These protocols are continually expanded to include new pathogens or improve previous assays.

TRUSTED BY PUBLIC HEALTH AGENCIES WORLDWIDE



**SUPPORTS PANDEMIC RESPONSE
(SARS-CoV-2, INFLUENZA, POLIO)**

**ENABLES WASTEWATER SURVEILLANCE
AND OUTBREAK TRACKING**

**VALIDATED IN PEER-REVIEWED
PUBLIC HEALTH STUDIES WORLDWIDE**

	qPCR Applications			Sequencing Applications				
	Bacterial/ Fungal Pathogen Detection/ Quantification	Viral Pathogen Detection/ Quantification	Genotyping	16S/ 18S/ ITS Amplicon Sequencing	AMR Testing and Tracking	Whole Genome Sequencing	Whole Viral RNA Sequencing	Long Read Sequencing
PerfeCta qPCR ToughMix/ Multiplex ToughMix	✓		✓					
UltraPlex 1-Step ToughMix		✓	✓					
qScript XLT 1-Step ToughMix		✓	✓					
eQo 1-Step ToughMix		✓	✓					
qScript Ultra Flex Kit			✓				✓	✓
repliQa HiFi ToughMix				✓	✓		✓	✓
sparQ DNA Library Prep Kits					✓	✓	✓	

Viral Surveillance and Pandemic Response

Trusted by renowned institutions such as the CDC and the WHO.

CDC 2019-Novel Coronavirus
(2019-nCoV) Real-Time RT-PCR
Diagnostic Panel



Polio Eradication Initiative,
Poliovirus rRT-PCR ITD 4.1
Addendum Kit



World Health
Organization



Viral Pathogens Detection Across Key Disease Areas

Scan or click the QR codes to see the latest peer reviewed publications that incorporate Quantabio PCR and qPCR products into assays for these pathogens.

RESPIRATORY



Influenza



SARS-CoV-2



HEPATIC / LIVER



Hepatitis



RVFV*



NEUROLOGICAL



Polio



Zika



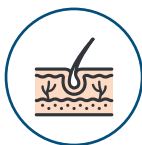
IMMUNE / BLOOD



HIV



DERMATOLOGICAL / SYSTEMIC



Mpox



*RVFV can cause systemic disease, including hepatitis hemorrhagic disease, and encephalitis.

Classified here under Hepatic/ Liver



Detect More with Confidence.

Quantabio PCR and qPCR Solutions support accurate detection for a wide range of pathogens and sample types.

Bacterial Detection & Antimicrobial Resistance

Rapid bacterial detection and antimicrobial resistance (AMR) tracking are essential for protecting public health in an era of increasing drug resistance. Molecular methods enable highly sensitive and specific identification of pathogens within hours, allowing faster, targeted treatment decisions. At the same time, real-time AMR surveillance helps detect emerging resistance patterns before they spread widely. This not only improves patient outcomes but also supports more responsible antibiotic stewardship. Together, these capabilities strengthen outbreak response, reduce healthcare costs, and help preserve the effectiveness of existing antibiotics.

ANTIBIOTIC-RESISTANT "CRITICAL" PRIORITY PATHOGENS

Pathogens with broad antibiotic resistance that have a significant negative impact on health care.



FOODBORNE & WATERBORNE PATHOGENS

Pathogens transmitted through contaminated food and water that pose serious public health risks.



RESPIRATORY AND AIRBORNE PATHOGENS

Pathogens spread through the air or respiratory droplets that cause a range of respiratory diseases.



SEXUALLY TRANSMITTED INFECTIONS (STIs)

Infections transmitted through sexual contact with significant impact on individuals and public health.



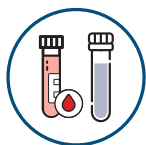
Sample Types

Molecular testing across diverse sample types enables comprehensive detection and monitoring of infectious diseases in both clinical and public health settings. Blood and body fluids provide critical insights into systemic infections, while cell and tissue samples support precise disease characterization at the site of infection or pathology. Swab-based testing offers rapid, minimally invasive detection of respiratory, gastrointestinal, and other communicable pathogens. Beyond clinical samples, wastewater surveillance delivers population-level genomic insights that can reveal emerging outbreaks and transmission trends early. Together, these complementary sample types create a more complete picture of disease spread, prevalence, and public health risk.

Blood & Body Fluids

Common PCR inhibitors:

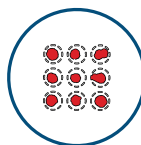
- Heme & hemoglobin
- Immunoglobulin, lactoferrin and bile salts
- Heparin and EDTA



Dried Blood Spots

Common PCR inhibitors:

- Heme & hemoglobin



Swabs

Common PCR inhibitors:

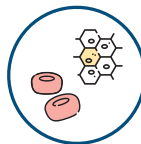
- Components of preservatives and lysis solutions (transport buffers)



Cells & Tissues

Common PCR inhibitors:

- Residual blood
- Components of extracellular matrix



Wastewater

Common PCR inhibitors:

- Humic acids
- Polyphenols
- Tannins
- Metals



Quantabio **ToughMix** chemistry helps overcome many of these commonly occurring **PCR inhibitors**.

Trademark: ToughMix® is a registered trademark of Quantabio LLC.

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