

Creating an efficient molecular diagnostics ecosystem

Molecular diagnostics (MDx) tests should provide results quickly and reliably. By choosing instruments, reagents, software, services, and support offerings that exist in a single MDx ecosystem, clinical laboratories can run molecular-based *in vitro* diagnostics (IVD) with efficiency using fewer resources.

Instruments

High-quality, time-saving instruments are the cornerstone of an effective MDx ecosystem. User-friendly and sustainable nucleic acid extraction and real-time PCR (qPCR) instruments enable reproducible results.



Real-time PCR

Applied Biosystems™ QuantStudio™ 5 Dx qPCR System

- 96-well block
- Under 30-minute run times
- Compact, benchtop system uses fewer consumables
- Requires minimal calibration components

Applied Biosystems™ QuantStudio™ 7 Pro Dx qPCR System

- Removable blocks for 96 or 384 samples
- Under 30-minute run times
- Standalone system uses fewer consumables
- Requires minimal calibration components
- Consumes 26% less energy than the previous model*
- Manufactured in a zero waste–certified facility**



Nucleic acid extraction

Thermo Scientific™ KingFisher™ Apex Dx Sample Purification System

- Optimized for automated clinical sample prep
- Compact, standalone instrument
- Removable blocks for 24 or 96 samples

Reagents and consumables

IVD instrument components are critical for high-quality, reproducible results. Reagents and consumables designed to work within the MDx ecosystem from Thermo Fisher Scientific can help streamline clinical laboratory workflows.



Applied Biosystems™ TaqPath™ PCR master mixes

- qPCR and one-step RT-qPCR kits available for various MDx testing needs
- Manufactured according to Current Good Manufacturing Practice (CGMP) principles
- Singleplex or multiplex formats suitable for fast run times



Applied Biosystems™ MicroAmp™ PCR plastics

- Designed for QuantStudio Dx instruments
- Promote optimal heat transfer and reduce cross-contamination
- Ideal for diagnostic tests

Software

Connecting instruments, consumables, services, and support into a single ecosystem, user-friendly software reduces manual steps in the MDx qPCR workflow.



Applied Biosystems™ Diomni™ Enterprise Software

- Improves efficiency and reduces human error
- Overall time-to-results of approximately three hours*
- Saves operators over two hours of time*
- Run protocols, set quality control parameters and analysis settings, and interpret results all in one workflow
- Centralized data management—integrates with laboratory information systems

Services and support

A number of services and support options connected to Applied Biosystems™ QuantStudio™ instruments help clinical laboratories run quickly and smoothly.



Global customer concierge services

- These services help scientists prepare for and coordinate QuantStudio instrument installation, set up network connections, and schedule training sessions

SmartStart™ Orientation

- Experienced field application scientists train laboratory teams on MDx instruments, software, and security features

Smart Help

- Scientists share log and run files to help speed up troubleshooting

Remote support

- Scientists can reach trained professionals at the touch of a button
- Support-team members access laboratory systems and interact with users on instrument screens
- With real-time troubleshooting, 70% of cases are resolved in minutes*

Services and support offerings reduce the overall time to system launch by

up to 75%*

and help keep clinical laboratories running efficiently.



Data integrity

QuantStudio instruments help clinical laboratories maintain data quality and security.

- Maintenance and calibration reports
- Reagent and sample tracking
- E-signature history
- Detailed results reports

Discover the MDx ecosystem for clinical laboratories from Thermo Fisher at thermofisher.com/qpcr-molecular-diagnostics