



Performs at the same high level you do
*Keep pace with the changing needs of your
molecular lab with the **cobas**® 4800 System*



cobas®
Life needs answers

Where high performance meets simplicity

*Roche introduced PCR and continues to advance real-time PCR through hardware and software innovations that pave the way for new standards of performance and reliability. From sample loading to final reporting, the **cobas**[®] 4800 System delivers a high-performance combination of ease of use and flexibility for lab efficiency and dependable results.*

Reduce hands-on time, maximize walk-away time

A flexible, automated platform meets your workflow and throughput demands. Just load sample vials and walk away. The system automatically performs the assay preparation procedure and transfers samples to 96-well plates, ready for PCR amplification and detection.

Automated nucleic acid extraction

Fully automated from multiple specimen types, including swab, urine and liquid cytology vial.

Reliable real-time PCR system

Multiplex real-time PCR for the detection of multiple targets in one reaction, based on LightCycler[®] technology.

Run your own assays

User Defined Workflow software* (UDF) provides open-mode capabilities so your laboratory can design customized applications that fit your needs.

IT solutions that support you

Bi-directional LIS connectivity

Test ordering can be easier and less prone to transcription errors. Built-in communication components make it easy to connect to your current LIS. Technicians simply insert barcoded primary vials into the system, and the system automatically queries your LIS to download testing information. System software automatically displays LIS availability and transfer status.

Roche Middleware Solutions facilitates communication

Minimizes time between system implementation and go-live date by supporting communication with virtually any LIS.

Remote diagnostics support to reduce downtime

Enhanced service and technical support via our secure web connection streamlines troubleshooting.

* For general laboratory use.



Setting the standard for high-performance design

Results integrity

AmpErase[®] enzyme destroys virtually all previously generated amplicon to reduce the risk of carryover contamination.

An **internal control** is automatically added to each sample during specimen processing to minimize the risk of false-negative results.

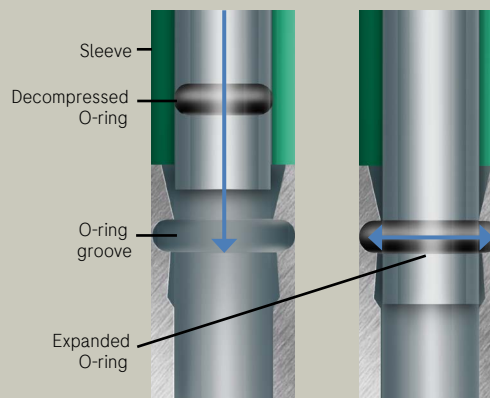
A proprietary **kinetic algorithm** eliminates the need to examine PCR curves.

Intelligent pipetting

System incorporates unique pipette tip locking and monitoring technology for reliable sample transfer.

Total Aspirate and Dispense Monitoring (TADM)

Monitors pressure within each pipette tip during each pipetting cycle to verify transfer and flag problems in real time. A pressure response that falls outside the expected range is reported in real time and recorded in a traceable digital log.



CO-RE tip technology

Actively locks pipette tips in place with an expanding O-ring. When the tip is released, the O-ring gently decompresses, avoiding projection of aerosols that could create cross-contamination.

Do more, more easily

Laboratories today need the flexibility to manage daily workflow and varying throughput demands. They also need to be able to adapt quickly when needs change. The **cobas**[®] 4800 System delivers that flexibility with walk-away sample preparation plus advanced real-time PCR amplification/detection.



cobas x 480 Instrument

Automated sample preparation does more, so you can get more done

Low maintenance, high efficiency

Save time:

- Less than 10 minutes required for daily or weekly maintenance; no monthly maintenance
- No pipetting into secondary tubes required; accepts multiple primary vial formats, including liquid-based cytology for automatic nucleic acid extraction
- Load-and-go reagents eliminate complex reagent preparation procedures
- Less than 30 minutes of setup time* needed for run of 94 specimens
- Parallel testing in 96-well plate format for flexibility and improved time to result
- No post-run decontamination with bleach solution needed

Minimize errors:

- Barcode reader scans samples as they're loaded, and the system automatically queries LIS to download information for automatically generating a work order—for positive patient ID through the entire run
- Total Aspirate and Dispense Monitoring (TADM) verifies sample transfer in real time to help ensure valid results
- CO-RE tip technology for secure tip attachment and precise tip positioning to minimize aerosol production to prevent cross-contamination
- Anti-droplet control (ADC) automatically compensates for volatile reagent vapor in pipette tips by continually monitoring pressure and adding vacuum to tips as needed

*Source: 2012 Argent Study- HPV System Comparison v 5.0. Data on File.



cobas z 480 Analyzer

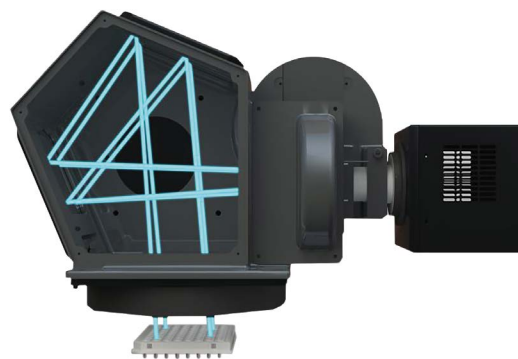
Advanced real-time PCR technology for high-quality results

Reliable results with no grey zone

Proprietary kinetic algorithm removes ambiguity. PCR curves are automatically checked and validated for consistency, delivering definitive results in high- and low-prevalence populations.

High specificity

- Optimized filter design helps ensure high specificity
- Highly efficient signal excitation and data capture reduce signal artifacts and help ensure data integrity



High-performance optics

are engineered to ensure specific signal excitation and emission, and uniform data collection across the entire PCR plate.

*System software enables IVD testing for infectious disease **and** oncology markers on **one cobas[®] 4800 System**. This helps deliver maximum workflow flexibility for small and large labs alike.*

Robust amplification and detection, and rapid, uniform thermal cycling

Carries over all the technological advances of the LightCycler 480 analyzer, providing unmatched temperature homogeneity and advanced optics for rapid amplification and high-quality results.

- Unique Thermo-BaseE layer between heat block and cooling element provides optimal heat transfer/distribution for faster, more reproducible results
- 5 optical channels enable multiple target detection in one reaction

Your needs inspire our dedication to innovation and service

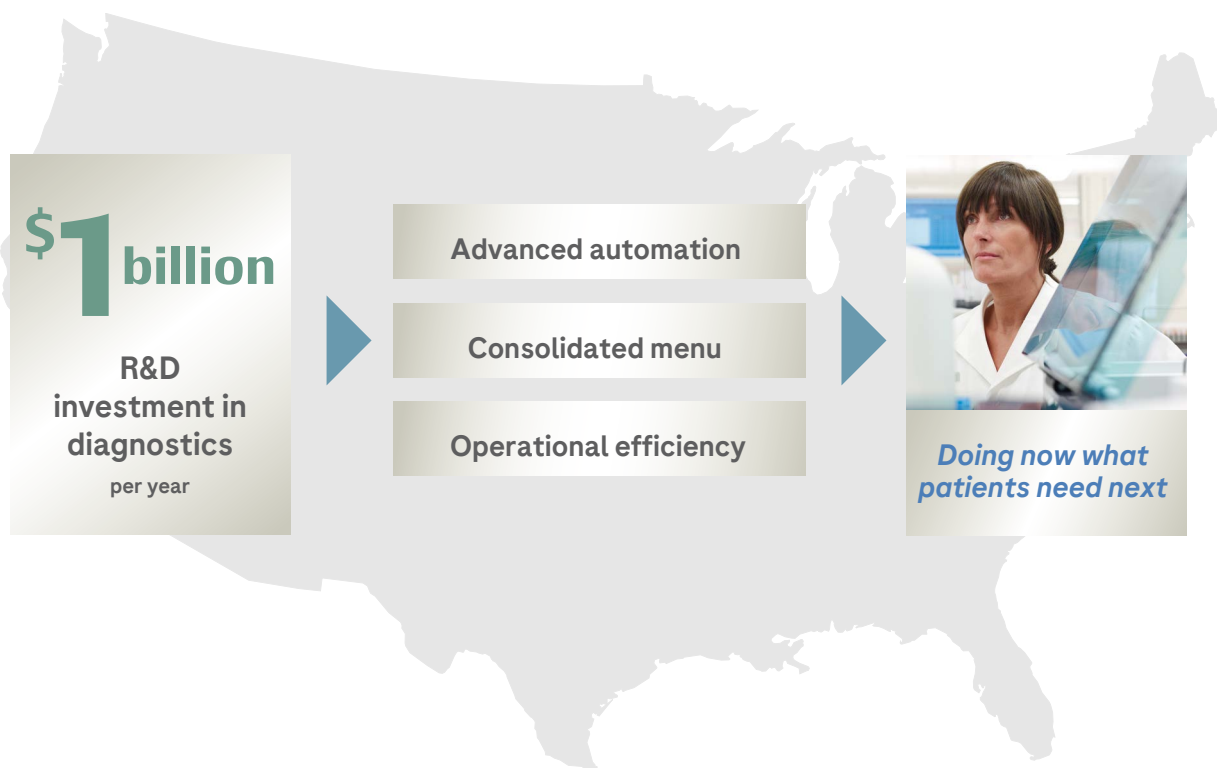
Every Roche assay is backed by extensive experience and expertise in test design and optimization, a commitment to robust performance standards and an unparalleled dedication.

Proven service and support from a trusted leader

Roche introduced PCR and is still perfecting it every day. No company has more experience in molecular diagnostics, or in supporting you. One call gives you direct access to a world-class support organization.

The future of molecular diagnostics

Doing now what patients need next



**For more information, contact your Roche Molecular Diagnostics Representative,
visit www.usdiagnostics.roche.com or call 1-800-981-8863.**

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