cobas® 8100 automated workflow series
3-D intelligence in lab automation
Personalized Lab Automation
Maximizing Testing Efficiency and Medical Value

At Roche, laboratory automated solutions deliver the quality and reliability you expect, with the personalization required by low-, mid- and high-volume laboratories.

1. Virtual Automation
To have the control you need, ensuring quality and efficiency across your lab, Virtual Automation gives you the capability to track your samples and reduce manual tasks through the cobas IT solutions.

2. Standalone Automation
Pre- and post-analytical tasks are automated, offering maximum efficiency through flexible standalone solutions. It significantly reduces manual steps in the lab, enhancing error handling, safety and process quality.

3. Connected Automation
In addition to having all the benefits of Standalone Automation, Connected Automation offers transportation. Physically connecting different instruments allows maximum predictability of time to test results.

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The complete solution, today and tomorrow

Quality and reliability you can trust
Quality comes first
Early check of the samples quality at the pre-analytical stage for maximum workflow efficiency

Workflow your way
Personalized workflows to enable you to choose among primary, aliquot or mixed workflow

Flexible tube storage
cobas® 8100 offers three different storage areas for tubes ensuring fast access as soon as the tube is needed

Short and predictable time to results
3D intelligent tube transport offers short and predictable time to results. Streamlined processing of multiple disciplines

Whether your laboratory’s challenge is high throughput, short turnaround times or both, the cobas® 8100 automated workflow series will fulfill your laboratory’s changing needs, allowing you to work faster and more efficiently.

Workflow your way
Personalized workflows enable you to choose from primary, aliquot or mixed workflow, the choice is yours.

• Primary sample workflow – if the focus is on cost efficiency
• Aliquot workflow – if the focus is on sample integrity and parallel testing
• Mixed workflow – to optimize the benefits of both

Quality comes first
At an early pre-analytical stage, Roche automation solutions check the sample quality through a high definition camera and liquid level detection, maximizing workflow efficiency.

• Early error detection
• Reduced workload
• No reagent waste

Sample quality check right from the start

Normal Hemolytic Lipemic Icteric
Workflow with primary samples
Less consumables, less waste
Workflow with aliquoting
Maintain sample integrity and deliver parallel processing for improved TAT
Mixed workflow
Benefit from primary sample testing while being able to maintain sample integrity and improve TAT
When high-throughput sample processing is required and physicians and their patients are waiting, it is critical to avoid any delays in the workflow. In cobas® 8100, 3-D intelligent bi-directional transportation is located inside each module. The transport lines lie on two levels: an upper level for full carriers and a lower level for empty carriers, ensuring that empty carriers do not block the sample transportation line. The unobstructed sample transportation, with fast access to the next processing step, results in a predictable short turnaround time, even during peaks in your laboratory’s workflow.

Flexible tube storage
A solution with cobas® 8100 offers three storages concepts, ensuring fast automated access to samples whenever needed.

- **3D bi-directional tube transport**
  - Tubes always have a clear destination
  - Tubes can bypass modules
- **Multi-level tube transport**
  - Full and empty sample carriers run on different levels
  - Short and predictable time to results

STAT prioritization in all steps in the process
- STAT management in pre-analytical phase and sample transport
- STAT management in all analyzers

Multi-discipline connectivity to automate the full menu
- Broad reagent portfolio to consolidate 98% or more of routine serum work area
- Designed with options for connectivity to immuno and clinical chemistry, hematology, coagulation, selective best-in-class third-party analyzers and archiving
- cobas® 8100 fully automates the laboratory process from sample entry to archive
- Integrated post-analytic solutions with add-on buffer module for add-on requests within one day

Short-term storage
When a sample needs only one run

Long-term storage
To ensure long-term sample stability
cobas® 8100 automated workflow series
Accommodates your laboratory’s specific needs

Moludar and Scalable
Easy on-site growing as you need it
• Easy addition of modules for more functionality or higher throughput
• Easy addition of analyzer modules within an existing analyzer core
• Easy addition of a new analyzer by expanding the layout

Building on long-standing experience, the high quality standards, a proven reliability, as well as innovative cutting-edge technology, the cobas 8100 automated workflow series from Roche and Hitachi serves all your automation needs and helps ensure that you will always deliver – whatever the demands may be.

cobas 8100 intelligent tube transport provides a short predictable time to results, including prioritization for emergency samples. With flexible workflows, early error detection and fully automated add-on handling, cobas 8100 allows for personalized solutions to suite individual laboratory needs, ensuring that quality comes first.