

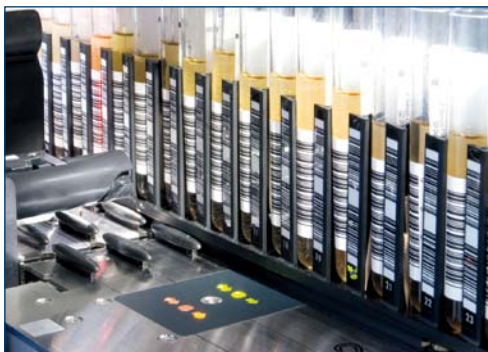
# QIASymphony® RGQ — Pure Performance





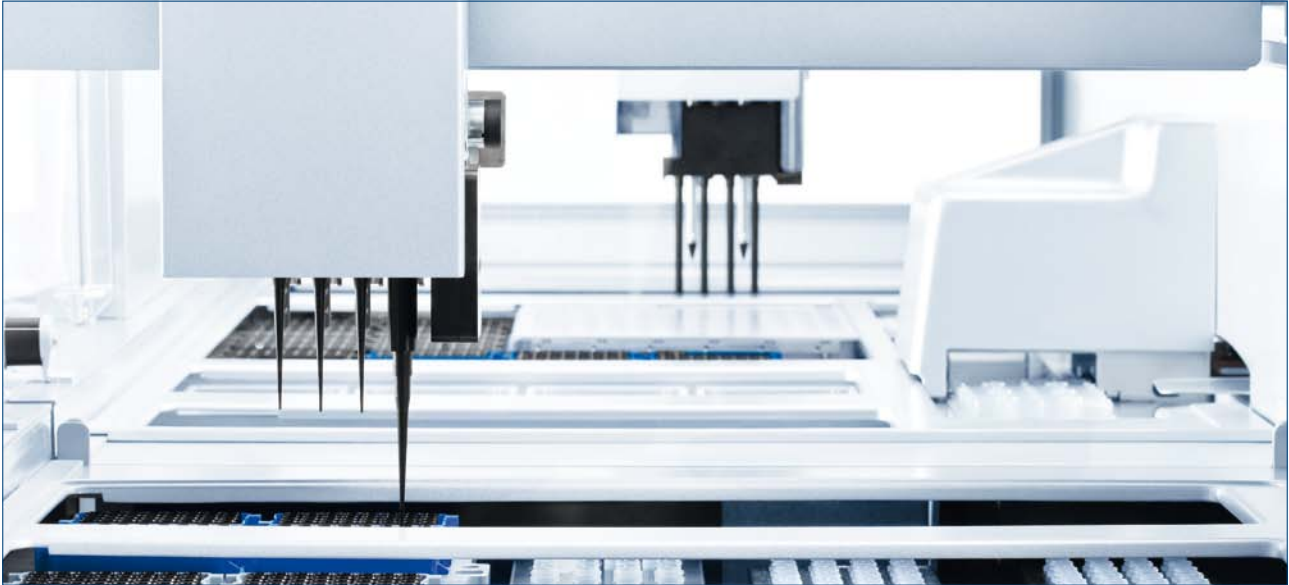
## Relax and let QIAGEN® automate your complete workflow

QIAGEN now provides everything you need to standardize and fully automate your routine sample preparation and analysis workflow. With our dedicated range of QIASymphony Kits, the QIASymphony SP enables sample preparation of DNA, RNA, bacterial and viral nucleic acids, and 6xHis-tagged protein from a wide range of starting materials. The QIASymphony AS extends the capabilities of the QIASymphony SP by integrating automated PCR assay setup which, in combination with the Rotor-Gene® Q and QIAGEN real-time and end-point PCR kits, enables you to complete your automated PCR workflow and maximize your efficiency — from sample to result.



### The QIASymphony provides:

- Standardized sample preparation and PCR assay setup
- Built-in touchscreen and prefilled reagent cartridges for ease of use
- Liquid-level detection, active cooling, and UV lamp for decontamination
- Applications for certified QIAGEN and in-house assays
- Protocol customization service and support for in-house assays



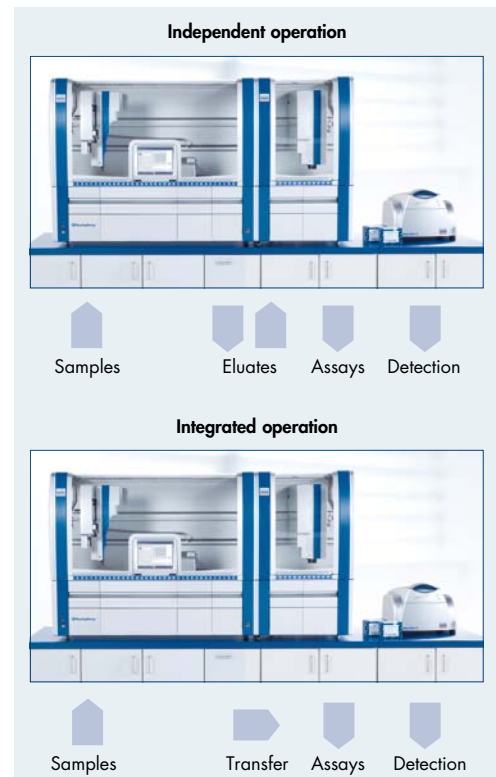
## Cutting-edge system for standardized sample preparation and PCR setup

The QIASymphony system is highly suited for laboratories that analyze samples on a day-to-day basis. With predefined protocols and automatable QIAGEN kits for sample preparation and PCR setup, the QIASymphony system will optimize your workflow and increase your laboratory's throughput. The QIASymphony SP is already the first choice for many laboratories, enabling success in virus and bacterial analysis, gene expression analysis, and in forensics and genomics applications. The high level of standardization that the QIASymphony system achieves allows you to directly compare your results with laboratories around the world. QIAGEN offers tailored IQ/OQ products to support laboratory certification for full instrument qualification.\*

## Modular system for maximum convenience and process safety

Laboratories already operating a QIASymphony SP can easily upgrade their system onsite with a QIASymphony AS module. The QIASymphony AS directly interfaces with the QIASymphony SP, delivering fast, highly reproducible PCR setup. To reduce manual handling steps and minimize the risk of sample contamination, samples processed on the QIASymphony SP can be transferred automatically to the QIASymphony AS (integrated operation). For extra flexibility, the QIASymphony SP and AS can also be operated independently.† Samples that have been processed earlier in the day, or that have been processed on a different QIASymphony SP, can be manually transferred to the QIASymphony AS.

### QIASymphony workflows



\* For a full list of QIASymphony service agreements, please inquire.

† The QIASymphony SP and AS remain physically connected during independent operation.

Purification

Ass



Drug  
Development

Biomedical  
Research

Bioprocess  
Quality Control

Molecular  
Diagnostics



# Assay Setup

# Detection



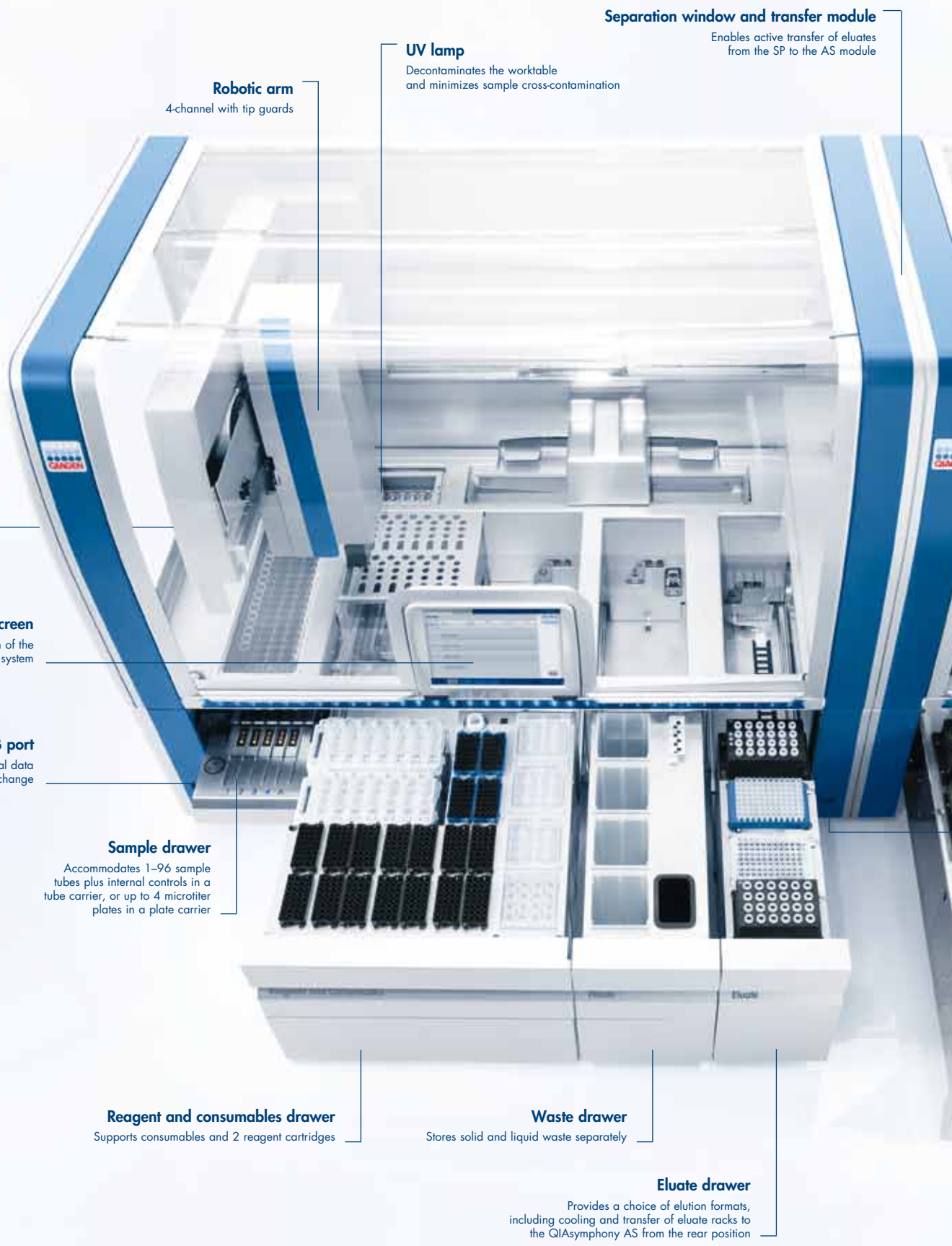
**Food Safety Testing**

**Human Identity and Forensics**

**Veterinary Testing**

**Companion Diagnostics**





**Separation window and transfer module**

Enables active transfer of eluates from the SP to the AS module

**UV lamp**

Decontaminates the worktable and minimizes sample cross-contamination

**Robotic arm**

4-channel with tip guards

**Ethernet adapter**

For connecting the QIAsymphony system to local networks

**Touchscreen**

For intuitive operation of the complete system

**USB port**

For bi-directional data exchange

**Sample drawer**

Accommodates 1–96 sample tubes plus internal controls in a tube carrier, or up to 4 microtiter plates in a plate carrier

**Reagent and consumables drawer**

Supports consumables and 2 reagent cartridges

**Waste drawer**

Stores solid and liquid waste separately

**Eluate drawer**

Provides a choice of elution formats, including cooling and transfer of eluate racks to the QIAsymphony AS from the rear position



**Robotic arm**  
4-channel with tip guards

**UV lamp**  
Decontaminates the worktable and minimizes sample cross-contamination

**USB port**  
For connecting handheld bar code reader

**Eluate and reagents drawer**  
Supports master mix, samples, reagents, and preracked consumables

**Assays drawer**  
Provides active cooling of PCR assays

### Unmatched flexibility:

- 1–96 samples processed each run
- Sample volumes up to 2 ml
- Supports variety of sample tubes, microtiter plates, and blocks
- Continuous loading in batches of up to 24 samples
- Ability to run different protocols for each batch

### Optimized workflow:

- Higher sample throughput per day
- Saves precious primary samples
- Optimal batch-to-batch reproducibility
- Standardized process permits global comparability of results
- LIMS compatibility
- User management for record of responsibility

### Convenience:

- Eluate splitting for different analysis panels
- Minimization of cross-contamination
- Active cooling of reagents and eluates
- Automatic inventory scanning
- Effective UV worktable decontamination
- Bar code reader for exact sample tracking





Sample information after sample loading.

## Easy-to-use software

QIASymphony operating software guides the user through setting up a sample preparation or assay setup run in a step-by-step fashion, with options to select and adapt standardized protocols. Required volumes of buffers, reagents, master mix, and controls are automatically calculated and the user is informed of the number and type of consumables to be loaded. Transfer of sample loading information from the QIASymphony SP to the QIASymphony AS is convenient and reduces the number of steps required for assay definition, thus minimizing the risk of error and sample loss.



Assay definition of 2 PCR assays.

## Standardized data exchange permits LIMS compatibility

The QIASymphony system provides standardized communication interfaces. Work lists and rack files can be imported to the QIASymphony system, enabling automatic run definition before samples are received in the laboratory. After assay setup, sample lists can be exported to selected real-time PCR cyclers, including the Rotor-Gene Q. This bi-directional data exchange allows integration of QIASymphony systems into laboratory information management systems (LIMS).



Reagent loading information for the QIASymphony AS.

## Seamless sample traceability

Bar code reading of samples and reagents enables full sample tracking throughout the entire purification and assay setup procedure. The QIASymphony system provides chronological electronic documentation of results, including information about sample IDs, their positions on the worktable, and the lot number and expiration date of sample preparation and PCR reagents. Multi-level user management provides a record of which user was responsible for sample processing. Electronic result files can be automatically printed via a networked printer, or can be downloaded using a USB stick for archiving purposes.



## Unrivalled application range on the QIAAsymphony SP

QIAAsymphony Kits — backed by QIAGEN Quality® — increase laboratory efficiency since just a few kits in combination with optimized protocols cover an extensive range of starting materials and applications (Table 1). Sample volumes of up to 2 ml, and up to 50 mg of tissue or 10<sup>7</sup> cells can be processed, providing increased nucleic acid yields for gene expression and genomics applications and higher sensitivity in virology and microbiology applications.

The QIAAsymphony SP delivers pure performance in virus and bacteria applications and provides unrivalled flexibility for purifying DNA from blood, RNA from tissues and cells, or His-tagged proteins from *E. coli* or eukaryotic cells. For up-to-date information about QIAAsymphony applications, visit [www.qiagen.com/goto/QIAAsymphony](http://www.qiagen.com/goto/QIAAsymphony).



## Innovative reagent cartridges for ultra-efficient purification

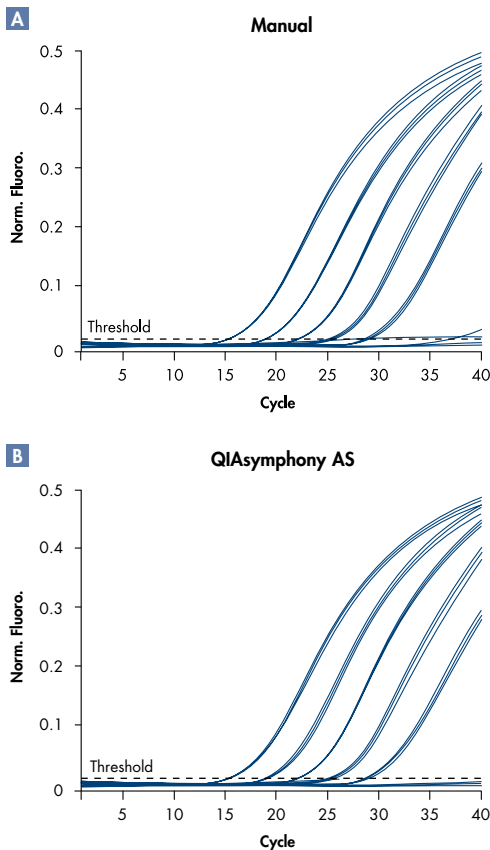
QIAAsymphony Kits are safe and exceptionally easy to use. Ready-to-run, bar code-labeled reagent cartridges are prefilled with all reagents required for the purification procedure, including accessory enzymes. Worktable setup is rapid and saves you valuable time. Simply place up to 2 reagent cartridges in the QIAAsymphony drawer. The reagent cartridges can be either from the same kit or different kits, enabling different purification procedures to be performed within the same run of 96 samples. Reagent cartridges are automatically opened by the instrument and reagent volumes only for the selected number of samples are used, giving you complete cost control.



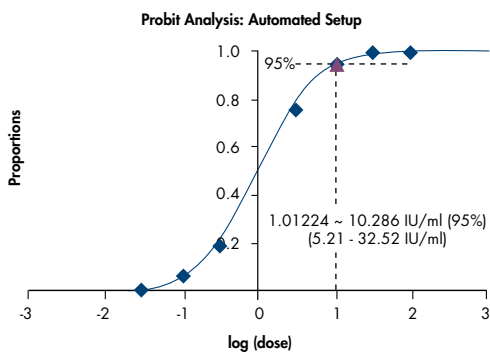
**Table 1. Dedicated QIAAsymphony Kits for a wide range of starting materials**

QIAAsymphony Kit	Starting material and amount
<b>QIAAsymphony Certal® Residual DNA</b>	Purification of DNA from up to 1000 µl biological process samples
<b>QIAAsymphony Certal Vaccine NA</b>	Purification of viral nucleic acids from up to 1000 µl biological process samples
<b>QIAAsymphony DSP AXpH DNA</b>	Purification of DNA from liquid-based cytology samples using AXpH technology
<b>QIAAsymphony DSP DNA</b>	Purification of DNA from up to 1000 µl human whole blood, 400 µl buffy coat, 50 mg tissue, or 1 x 10 <sup>7</sup> cells
<b>QIAAsymphony DNA Investigator®</b>	Purification of reference and casework samples for human identity testing and forensics
<b>QIAAsymphony DSP Virus/Pathogen</b>	Purification of viral nucleic acids from up to 1000 µl plasma, serum, or CSF. Purification of viral nucleic acids and bacterial DNA from up to 800 µl respiratory samples, urine, transport media, or air-dried swabs
<b>QIAAsymphony mericon® Bacteria</b>	Purification of bacterial DNA from 500 µl enrichment culture
<b>QIAAsymphony Ni-NTA Denaturing</b>	Purification of 6xHis-tagged proteins from up to 5 ml <i>E. coli</i> or up to 2.5 x 10 <sup>7</sup> eukaryotic cells
<b>QIAAsymphony Ni-NTA Native</b>	Purification of 6xHis-tagged proteins from up to 5 ml <i>E. coli</i> or up to 2.5 x 10 <sup>7</sup> eukaryotic cells
<b>QIAAsymphony PAXgene® Blood RNA*</b>	Purification of cellular RNA from 2.5 ml human whole blood collected in PAXgene Blood RNA Tubes
<b>QIAAsymphony RNA</b>	Purification of total RNA and miRNA from up to 50 mg tissue, FFPE tissue, or 1 x 10 <sup>7</sup> cells

\* Up to 48 samples can be processed per run.



**Figure 1. Highly reproducible assay setup.** A serial dilution of leukocyte cDNA (100 ng to 0.01 ng) was performed **A** manually and **B** using the QIASymphony AS. GAPDH was amplified from these dilutions, using the Rotor-Gene Q and the Rotor-Gene Probe PCR Kit. Reactions were set up in replicates of 4 in Strip Tubes.



**Figure 2. Automated assay setup is as sensitive as manual assay setup.** Half-log dilutions of WHO HBV standard (n=8) were performed in replicates of 8. Assay setup was performed manually and using the QIASymphony AS. Amplification was performed using the Rotor-Gene Q and a validated, in-house real-time PCR assay. Automated and manual assay setup were equally sensitive. Manual setup: 1.04698 ~ 11.142 IU/ml, (6.039–33.22 IU/ml)

## Transfer your purified samples directly to the QIASymphony AS

The QIASymphony AS can simplify your routine work processes — even setting up complex PCR assays is fast and easy. Manual pipetting steps that are prone to human error are eliminated, so the QIASymphony AS delivers more accurate pipetting on a day-to-day basis than even highly experienced laboratory staff (Figures 1 and 2). Pipetting of master mix and sample transfer for 96 samples takes less than 25 minutes, leaving you and your staff with more valuable time for other tasks.

The QIASymphony AS is provided with predefined protocols, specifically designed for use with QIAGEN’s expanding portfolio of real-time, end-point, and *artus*<sup>®</sup> PCR kits (Table 2). Standardized pipetting schemes can be adapted as required by QIAGEN customization services. A choice of output adapters enables use of different real-time PCR cyclers (e.g., Rotor-Gene Q, 96-well cyclers, 32-capillary cyclers) for detection. You can now relax and let QIAGEN’s automated solutions do the hard work for you — prepare your samples on the QIASymphony SP and then directly transfer your eluates to the QIASymphony AS for assay setup. To use the Rotor-Gene Q for detection, simply set up your PCRs in Strip Tubes or Rotor-Discs. Your workflow has never been easier!

## In-house pathogen detection assays

If you design your own in-house pathogen detection assays, QIAGEN can help you increase the number and type of assays you can do — without the need for tedious optimization steps. Our optimized master mixes, along with our commitment to high-quality manufacturing and Good Manufacturing Practice (GMP) principles, allow you to achieve reliable results with high process safety based on an internal control. From efficient purification of pathogen nucleic acids to reliable analysis using real-time RT-PCR kits such as the QuantiFast Pathogen +IC Kits and the QuantiTect Virus Kits, QIAGEN can cover each step of your laboratory procedure.

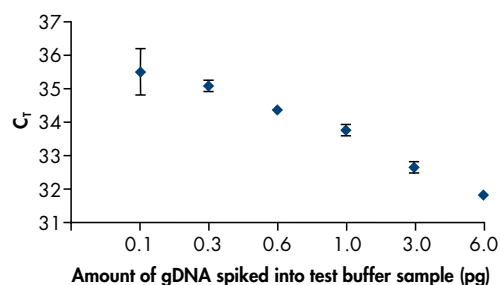
**Table 2. Automate proven QIAGEN PCR kits with the QIASymphony AS\***

Application	Method	Kit	Description
<b>Gene expression analysis</b>	Real-time RT-PCR	Rotor-Gene kits for SYBR® green or probe detection	Rapid and reliable qRT-PCR on the Rotor-Gene Q
	Real-time RT-PCR	RT <sup>2</sup> Profiler PCR Arrays for SYBR green detection	Pathway-focused qRT-PCR
<b>Pathogen detection</b>	Real-time PCR and RT-PCR	QuantiFast® Pathogen +IC Kits	Highly sensitive detection of pathogen RNA or DNA using an internal control
	End-point RT-PCR	QIAGEN OneStep RT-PCR Kit	Highly sensitive detection of viral RNA
	Real-time PCR and RT-PCR	<i>cador</i> ® veterinary†	Ready-to-use, validated real-time PCR assays to detect veterinary pathogens
	Real-time PCR and RT-PCR	<i>artus</i> PCR and RT-PCR Kits‡	Ready-to-use real-time PCR assays for pathogen detection
<b>Pathogen typing</b>	High-resolution melting (HRM®)	Type-it® HRM PCR Kit	Detection of gene mutations and SNPs by high-resolution melting analysis
<b>Food safety testing</b>	Primer-based real-time PCR Probe-based RT-PCR	<i>mericon</i> food testing kits	Automated pathogen DNA extraction from primary bacterial enrichment cultures and real-time PCR assays to detect pathogens
<b>Genotyping</b>	PCR	Type-it Fast SNP Probe PCR Kit	SNP genotyping using TaqMan® or TaqMan MGB™ probes
	High-resolution melting	Type-it HRM PCR Kit	Detection of gene mutations and SNPs by high-resolution melting analysis
<b>Methylation analysis</b>	High-resolution melting	EpiTect® HRM PCR Kit	Portfolio of real time PCR kits and assays for highly sensitive quantification of specific methylated regions
	Probe based real-time PCR	EpiTect Methylight PCR Kit	Optimized HRM PCR kits for sensitive detection and screening of differential methylated regions
<b>Residual DNA detection</b>	Real-time PCR using probes	Certal Residual DNA Detection Kit	Sensitive probe-based detection of residual host cell DNA, including an internal control

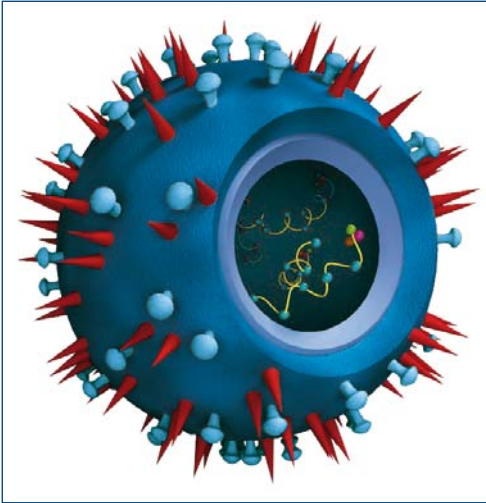
\* For a full list of QIAGEN PCR kits, including kits for genotyping and other specialized applications, visit [www.qiagen.com/goto/PCR](http://www.qiagen.com/goto/PCR). For availability of QIASymphony AS protocols, please inquire. † *cador* veterinary PCR and RT-PCR Kits are not available in the US or Canada. ‡ *artus* PCR and RT-PCR Kits are not available in the US.

## Bioprocess quality control

When working with biopharmaceuticals, it is essential to evaluate the purification process and the final therapeutic material. Quantitative data of sufficient sensitivity is needed to fulfill regulatory (e.g., FDA) requirements. QIAGEN's integrated system for molecular testing — the QIASymphony RGQ — delivers optimized and ready-to-use solutions for automated purification and quantification of residual host-cell DNA and viral nucleic acids. This includes sample preparation on the QIASymphony SP using QIASymphony Certal Kits, assay setup on the QIASymphony AS, and detection on the Rotor-Gene Q PCR cyclers in combination with Certal Detection Kits. This workflow ensures the generation of sensitive and reliable results, regardless of whether the starting material is derived from bioprocess purification buffer, cell culture supernatant, or vaccine preparations. For downstream detection, QIASymphony Certal Detection Kits enable highly sensitive detection of residual genomic DNA from CHO and Vero cell lines using quantitative PCR. DNA amounts down to 0.1 pg can be reliably purified (Figure 3). The Certal Internal Control and the Certal Residual DNA Positive Control are additional options for quality control supporting the interpretation of results for detection false negative samples.



**Figure 3. Reliable purification of small quantities of residual host-cell DNA.** Genomic CHO DNA was spiked into buffer AEX to create 6 test buffer samples. 4 replicates from each of the 6 test buffer samples were purified and analyzed by qPCR in triplicate using the Certal CHO Detection Kit. The graph shows the means of the replicates and their standard deviations, indicating a low limit of detection.

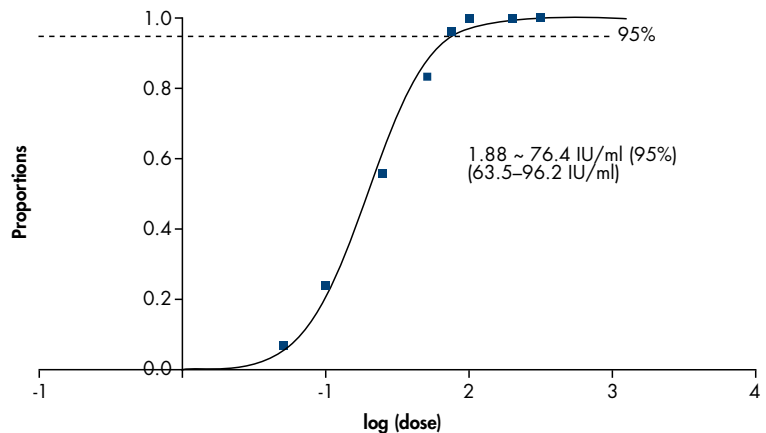


## Molecular diagnostics

High-quality viral DNA and RNA, and bacterial nucleic acids can be purified from a wide range of sample types (Table 3 and Figure 4) using QIAasymphony DSP Virus/Pathogen Kits on the QIAasymphony SP. Optimized protocols deliver high yields of pure nucleic acids, and flexible elution volumes support your downstream assays. The QIAasymphony SP is provided with standardized sample preparation protocols that define sample transfer, purification, and then elution. For purification of difficult samples or inactivation of samples, additional lysis procedures can be combined with the purification protocols.

**Table 3. Successful purification of a wide range of respiratory viruses from different sample types using the QIAasymphony SP**

Respiratory virus	Sample type
Adenovirus	Aspirates, swab
HSV1	Swab
Influenza A/B	Aspirates, BAL, sputum, swab, pharyngeal lavage
hMPV	Nasal secretion
Parainfluenzavirus 1-4	Aspirates, BAL, nasal secretion, swab
Coronavirus	Aspirates, nasal secretion, sputum, swab
Rhinovirus	Nasal secretion, tracheal and pharyngeal lavage
Enterovirus	Nasal secretion, pharyngeal lavage
RSV	Aspirates, sputum, swab, nasal secretion, pharyngeal lavage
Bocavirus	Nasal secretion, tracheal and pharyngeal lavage



**Figure 4. Probit analysis: HI Virus-1 (Rotor-Gene Q).** Analytical sensitivity in consideration of the purification (QIAasymphony DSP Virus/Pathogen Kit) of the *artus* HI Virus-1 QS-RGQ Kit\* on the Rotor-Gene Q.

\* The *artus* HI Virus-1 QS-RGQ Kit may not be available in all countries. Please contact QIAGEN or your local QIAGEN distributor for availability.

## Food safety testing

QIAGEN's *mericon* portfolio of food safety testing products is one of the broadest on the market. Combining innovative technology with expertise in molecular testing for the crucial issues of public safety and quality control, these high-quality solutions yield rapid and sensitive results from a wide range of starting materials.

The *mericon* portfolio includes solutions for safe and reliable identification of a broad range of food pathogens, such as *Salmonella* spp., *Listeria* spp., *Campylobacter* spp., verotoxin-producing *Escherichia coli*, *Cronobacter* spp., *Staphylococcus aureus*, *Legionella* spp., *Shigella*, and *Yersinia enterocolitica*.

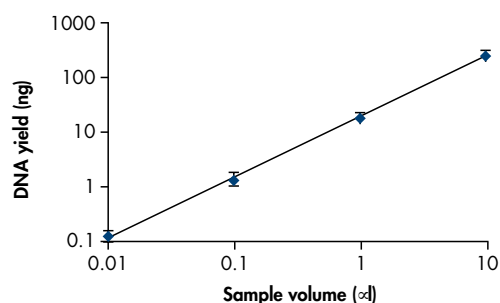
Testing for food pathogens can be automated using the QIASymphony RGQ and *mericon* products.

- Automated pathogen DNA extraction
- Automated PCR assay setup on the QIASymphony AS module
- Pathogen detection on the Rotor-Gene Q

The QIASymphony RGQ is a unique integrated workflow solution for food safety testing. It provides standardized analyses and can increase your laboratory's throughput, as it takes just one or two working days to go from sample to result. The continuous sample-loading feature of the QIASymphony SP further increases laboratory efficiency by reducing instrument downtime to a minimum. The workflow setup is flexible and tailored to fit the specific needs of modern food safety laboratories.

## Human identity and forensics

QIASymphony offers unequalled quality in DNA purification and assay setup in human identity and forensics analyses. Blood, buccal swabs, and forensic stains can be used as sample material for automated purification of total DNA using the QIASymphony DNA Investigator Kit. Suitable yields of DNA can be obtained from very small amounts of starting sample material (Figure 5). Furthermore, QIAGEN has a comprehensive assay portfolio for DNA quantification and DNA genotyping with the most versatile coverage of autosomal, gonosomal, and bi-allelic markers recommended by international standards such as ESS, ISSOL, and CODIS. Automated reaction setup on the QIASymphony results in an integrated workflow that further streamlines the use of Investigator PCR Kits and provides rapid, reliable, and accurate analyses.



**Figure 5. DNA is purified from small amounts of sample material.** Serial dilutions of blood samples were extracted using the QIASymphony SP and the DNA Investigator kit. Extracted DNA was quantified by real-time PCR.

## Ordering Information

Product	Contents	Cat. no.
<b>QIASymphony RGQ, System</b>		
QIASymphony SP	QIASymphony sample prep module, 1-year warranty on parts and labor	9001297
QIASymphony AS	QIASymphony assay setup module, 1-year warranty on parts and labor	9001301
Rotor-Gene Q 5plex HRM	Real-time PCR cycler and High Resolution Melt analyzer with 5 channels	9001580
<b>Related Products</b>		
QIASymphony Cabinet SP/AS	For correct positioning of the QIASymphony SP/AS instruments	9020246
QIASymphony DSP Virus/Pathogen Mini Kit (192)	For 192 preps: Includes 2 reagent cartridges and enzyme racks and accessories	937036
QIASymphony DSP Virus/Pathogen Midi Kit (96)	For 96 preps: Includes 2 reagent cartridges and enzyme racks and accessories	937055
QIASymphony DSP DNA Mini Kit (192)	For 192 preps: Includes 2 reagent cartridges and enzyme racks and accessories	937236
QIASymphony DSP DNA Midi Kit (96)	For 96 preps: Includes 2 reagent cartridges and enzyme racks and accessories	937255
QIASymphony DNA Mini Kit (192)*	For 192 preps of 200 µl each: Includes 2 reagent cartridges and enzyme racks and accessories	931236
QIASymphony DNA Midi Kit (96)*	For 96 preps of 1000 µl each: Includes 2 reagent cartridges and enzyme racks and accessories	931255
QIASymphony DNA Investigator Kit	For 192 preps from casework and reference samples: Includes 2 reagent cartridges and enzyme racks and accessories	931436
QIASymphony RNA Kit (192)	For 192 preps: Includes 2 reagent cartridges and enzyme racks and accessories	931636
QIASymphony PAXgene Blood RNA Kit (96)	For 96 preps: Includes 2 reagent cartridges and enzyme racks and accessories	762635
QIASymphony Certal Residual DNA Kit (96)	For 96 preps of 1000 µl each: Includes 2 reagent cartridges and enzyme racks and accessories	931855
QIASymphony Certal Vaccine NA Kit (96)	For 96 preps of 1000 µl each: Includes 2 reagent cartridges and enzyme racks and accessories	931955
Certal CHO Detection Kit (100)	Reagents and controls for 100 x 25 µl reactions: Certal Residual DNA PCR Master Mix, Uracil-N-Glycosylase, Internal Control DNA and Assay, CHO DNA Control and CHO-Assay, High ROX dye solution, ROX dye solution, Nucleic Acid Dilution buffer, TE Buffer	211822
Certal Vero Detection Kit (100)	Reagents and controls for 100 x 25 µl reactions: Certal Residual DNA PCR Master Mix, Uracil-N-Glycosylase, Internal Control DNA and Assay, Vero DNA Control and Vero-Assay, High ROX dye solution, ROX dye solution, Nucleic Acid Dilution buffer, TE Buffer	211842

\* Available until mid-2013.

## Ordering Information

Product	Contents	Cat. no.
<b>Related Products</b>		
QIASymphony <i>mericon</i> Bacteria Kit (360)	For 360 preps of 500 µl each: Includes 2 reagent cartridges and enzyme racks and accessories	931156
QIASymphony DSP AXpH DNA Kit (192)	For 192 DNA preps: Includes 2 reagent cartridges and enzyme racks and accessories	937156
QIASymphony Ni-NTA Denaturing Kit	For 384 micro-scale preps or 48 medium-scale preps: Includes 2 reagent cartridges and enzyme racks and accessories	932836
QIASymphony Ni-NTA Native Kit	For 384 micro-scale preps or 48 medium scale preps: Includes 2 reagent cartridges and enzyme racks and accessories	932636

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Visit [www.qiagen.com/goto/QIASymphony](http://www.qiagen.com/goto/QIASymphony) to find out more!

Trademarks: QIAGEN®, QIAGEN Quality®, QIAamp®, QIASymphony®, *artus*®, *cador*®, Certal®, EZ1®, HRM®, Investigator®, *mericon*®, QuantiFast®, QuantiTect®, Rotor-Disc®, Rotor-Gene®, Type-i® (QIAGEN Group); PAXgene® (PreAnalytiX GmbH); Sybr® (Molecular Probes Inc.); TaqMan® (Roche Group); MGB™ (Epoch Biosciences).

#### NOTICE TO PURCHASER:

The purchase of this product (Rotor-Gene Q, Rotor-Disc) includes a limited, non-transferable license to certain patents (see details below) surrounding rapid polymerase chain reaction (PCR) methods and instrumentation, the use of SYBR® Green I in PCR reactions, melting curve analysis, analysis methods of DNA melting data, specifically high resolution melting (HRM) and others.

**Rotor-Gene Q.** For applicable countries: The purchase of this product includes a limited, non-transferable license to one or more of US Patents Nos. 6,787,338; 7,238,321; 7,081,226; 6,174,670; 6,245,514; 6,569,627; 6,303,305; 6,503,720; 5,871,908; 6,691,041; 7,387,887; and U.S. Patent Applications Nos. 2003-0224434 and 2006-0019253 and all continuations and divisionals, and corresponding claims in patents and patent applications outside the United States, owned by the University of Utah Research Foundation, Idaho Technology, Inc., and/or Roche Diagnostics GmbH, for internal research use or for non-in vitro diagnostics applications. No right is conveyed, expressly, by implication or estoppel, for any reagent or kit, or under any other patent or patent claims owned by the University of Utah Research Foundation, Idaho Technology, Inc., and/or Roche Diagnostics GmbH, or by any other Party. For information on purchasing licenses for in-vitro diagnostics applications or reagents, contact Roche Molecular Systems, 4300 Hacienda Drive, Pleasanton, CA 94588, USA.

**Rotor-Gene Q MDx.** For applicable countries: The purchase of this product includes a limited, non-transferable license to one or more of U.S. Patent Nos. 6,787,338; 7,238,321; 7,081,226; 6,174,670; 6,245,514; 6,569,627; 6,303,305; 6,503,720; 5,871,908; 6,691,041; 7,387,887; 7,273,749; 7,160,998; U.S. Patent Application Nos. 2003-0224434 and 2006-0019253, and PCT Patent Application No. WO 2007/035806, and all continuations and divisionals, and corresponding claims in patents and patent applications outside the United States, owned by the University of Utah Research Foundation, Idaho Technology, Inc., Evotec Biosystems GmbH, and/or Roche Diagnostics GmbH for human or animal in-vitro diagnostics only. No right is conveyed, expressly, by implication or estoppel, for any reagent or kit, or under any other patent or patent claims owned by the University of Utah Research Foundation, Idaho Technology, Inc., Roche Diagnostics GmbH, or by any other Party. This product may be operated only with authorized reagents such as fully licensed QIAGEN kits and assays. For information on purchasing licenses for in-vitro diagnostics applications or reagents, please contact Roche Molecular Systems, 4300 Hacienda Drive, Pleasanton, CA 94588, USA.

**Rotor-Gene Q and Rotor-Gene Q MDx.** For applicable countries: This real-time thermal cycler is licensed under pending U.S. Patent rights for an apparatus or system covering automated thermal cyclers with fluorescence detectors and seeking priority to U.S. Serial No. 07/695,201 and corresponding claims in any foreign counterpart patent thereof owned by Applied Biosystems LLC, in all fields, including research and development, all applied fields, and human and animal in-vitro diagnostics. No rights are conveyed expressly, by implication or estoppel to any patents on real-time methods, including but not limited to 5' nuclease assays, or to any patent claiming a reagent or kit. For further information on purchasing additional rights, contact the Director of Licensing at Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California, 94404, USA.

For HRM versions only: Hi-Res Melting™ Mark under license from Idaho Technology, Inc for applicable countries.

© 2010–2012 QIAGEN, all rights reserved

[www.qiagen.com](http://www.qiagen.com)

**Australia** = Orders 1-800-243-800 = Fax 03-9840-9888 = Technical 1-800-243-066

**Austria** = Orders 0800-28-10-10 = Fax 0800-28-10-19 = Technical 0800-28-10-11

**Belgium** = Orders 0800-79612 = Fax 0800-79611 = Technical 0800-79556

**Brazil** = Orders 0800-557779 = Fax 55-11-5079-4001 = Technical 0800-557779

**Canada** = Orders 800-572-9613 = Fax 800-713-5951 = Technical 800-DNA-PREP (800-362-7737)

**China** = Telephone 86-21-3865-3865 = Fax 86-21-3865-3965 = Technical 800-988-0325 or 400-880-0325

**Denmark** = Orders 80-885945 = Fax 80-885944 = Technical 80-885942

**Finland** = Orders 0800-914416 = Fax 0800-914415 = Technical 0800-914413

**France** = Orders 01-60-920-920 or 0800-912965 = Fax 01-60-920-925 = Technical 01-60-920-930 or 0800-912961

**Germany** = Orders 02103-29-12000 = Fax 02103-29-22000 = Technical 02103-29-12400

**Hong Kong** = Orders 800 933 965 = Fax 800 930 439 = Technical 800 930 425

**India** = Orders 1-800-102-4114 = Fax 1-800-103-4114 = Technical 1-800-102-4115

**Ireland** = Orders 1800-555-049 = Fax 1800-555-048 = Technical 1800-555-061

**Italy** = Orders 800-789544 = Fax 800-789660 = Technical 800-787980

**Japan** = Telephone 03-6890-7300 = Fax 03-5547-0818 = Technical 03-6890-7300

**Korea (South)** = Orders 080-000-7146 = Fax 02-2626-5703 = Technical 080-000-7145

**Luxembourg** = Orders 8002-2076 = Fax 8002-2073 = Technical 8002-2067

**Mexico** = Orders 01-800-7742-639 = Fax 01-800-1122-330 = Technical 01-800-7742-436

**The Netherlands** = Orders 0800-0229592 = Fax 0800-0229593 = Technical 0800-0229602

**Norway** = Orders 800-18859 = Fax 800-18817 = Technical 800-18712

**Singapore** = Orders 1800-742-4362 = Fax 65-6854-8184 = Technical 1800-742-4368

**Spain** = Orders 91-630-7050 = Fax 91-630-5145 = Technical 91-630-7050

**Sweden** = Orders 020-790282 = Fax 020-790582 = Technical 020-798328

**Switzerland** = Orders 055-254-22-11 or 0800-897470 = Fax 055-254-22-13 = Technical 055-254-22-12 or 0800-837160

**Taiwan** = Orders 0080-665-1946 = Fax 8862-2369-1100 = Technical 0080-665-1947

**UK** = Orders 01293-422-9111 or 0808-2343665 = Fax 01293-422-922 = Technical 01293-422-999 or 0808-2343974

**USA** = Orders 800-426-8157 = Fax 800-718-2056 = Technical 800-DNA-PREP (800-362-7737)

