cador® Pathogen 96 QIAcube® HT Protocol

For use with the cador Pathogen 96 QIAcube HT Kit and QIAcube HT Plasticware

This protocol is intended for the automated purification of pathogen nucleic acids (viral RNA and DNA and bacterial DNA) from 200 µl animal whole blood, serum, plasma, swabs, or washes using the QIAcube HT instrument. By applying the pretreatments described in the cador *Pathogen 96 QIAcube HT Handbook*, tissue and fecal samples can also be processed. The procedure yields high-quality DNA and RNA that performs well in PCR, RT-PCR, and other downstream reactions. The *cador* Pathogen 96 QIAcube HT Kit combines the selective binding properties of a silica-based membrane with a high-throughput 96-well format, and is designed for fully-automated, simultaneous processing of 24–96 samples on the QIAcube HT instrument.

Q Protocol description:

- Run file: cador Pathogen 96 QIAcube HT V3.qsp
- Purification of viral RNA and DNA and bacterial DNA using silica technology
- Automated processing using vacuum filtration for lysis, bind, wash, and elution steps

Protocol specifications

Specification	Description
Number of samples	24–96 samples (to be processed in increments of 8)
Sample input volume	Up to 200 μl For sample volumes less than 200 $\mu l,$ add PBS or 0.9% NaCl solution to adjust the volume to 200 μl
Elution volume	150 µl
Duration	96 samples in approximately 90 minutes 24 samples in approximately 60 minutes Each additional 8 samples extend the processing time by 5 minutes



Worktable setup

For detailed protocol and worktable setup information, see the pre-run report and the cador *Pathogen 96 QIAcube HT Handbook*.

Reagents

Note: Each Reagent Trough must be loaded on the worktable in a Reagent Trough Adapter.

Reagent	Plasticware	Worktable position
Wash Buffer AW1	Reagent Trough 170 ml	R1
Wash Buffer AW2	Reagent Trough 170 ml	R1
Ethanol (96%)	Reagent Trough 70 ml	R1
Elution Buffer AVE	Reagent Trough 70 ml	R1
VXL mixture*	Reagent Trough 70 ml	C1
Binding Buffer ACB	Reagent Trough 70 ml	C1
TopElute Fluid	Reagent Trough 70 ml	C1

^{*} A mixture of Buffer VXL, Proteinase K, carrier RNA, and optional Internal Control.

Consumables

Consumables	Worktable position
Filter-Tips, OnCor C, 200 µl	B2 and C2 (2 × tip racks)
QlAamp® 96 well plate	A1 (waste (left) compartment of vacuum chamber)
Elution Microtubes RS	A1 (elution (right) compartment of vacuum chamber)

Samples

Samples	Worktable position
S-Block, 96-Well	B1

Ordering Information

Product	Contents	Cat. no.
cador Pathogen 96 QIAcube HT Kit	For 480 preps: QIAamp plates, QIAGEN Proteinase K, Carrier RNA, Buffers	54161
QIAcube HT Plasticware	For 480 preps: 5 S-Blocks, 5 EMTR RS, 2 x 50 Caps for EMTR, 9 x 96 Filter-Tips OnCor C, TapePad	950067
Elution Microtubes RS	24 x 96 Elution Microtubes, racks of 96; includes cap strips	120008
S-Blocks	24 x 96-well blocks with 2.2 ml wells	19585
TissueLyser		
TissueLyser II	Bead mill, 100–120/220–240 V, 50/60 Hz; requires the TissueLyser Adapter Set, 2 x 24 or TissueLyser Adapter Set 2 x 96 (available separately)*	85300
TissueLyser Adapter Set 2 x 24	2 sets of adapter plates and 2 racks for use with 2 ml microcentrifuge tubes on the TissueLyser II	69982
TissueLyser Adapter Set 2 x 96	2 sets of adapter plates for use with Collection Microtubes (racked) on the TissueLyser II	69984
TissueLyser LT	Compact bead mill, 100-240 V AC, 50–60 Hz; requires the TissueLyser LT Adapter, 12-Tube (available separately)†	85600
TissueLyser LT Adapter, 12-Tube	Adapter for disruption of up to 12 samples in 2 ml microcentrifuge tubes on the TissueLyser LT	69980
Stainless Steel Beads, 5 mm (200)	200 stainless steel beads (5 mm diameter), suitable for use with TissueLyser systems	69989

 $^{^{\}circ}$ The Tissuelyser II must be used in combination with the Tissuelyser Adapter Set 2 x 24 or Tissuelyser Adapter Set 2 x 96. † The Tissuelyser LT must be used in combination with the Tissuelyser LT Adapter, 12-Tube.

QIAcube HT instrument

QIAcube HT system Robotic workstation with UV lamp, HEPA filter, laptop,

9001793

QIAcube HT operating software, start-up pack, installation

and training, 1-year warranty on parts and labor

Accessories Pack, QXT Upgrade kit for QIAxtractor® instrument; adapter set to use

dedicated QIAcube HT kits on the QIAxtractor

Contains: Transfer Carriage (9022654), Riser Block EMTR

(9022655), and Channeling Adapter (9022656)

9022649

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 or can be requested from QIAGEN Technical Services or your local distributor.

For a complete list of accessories, visit www.giagen.com/p/QIAcubeHT.

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