

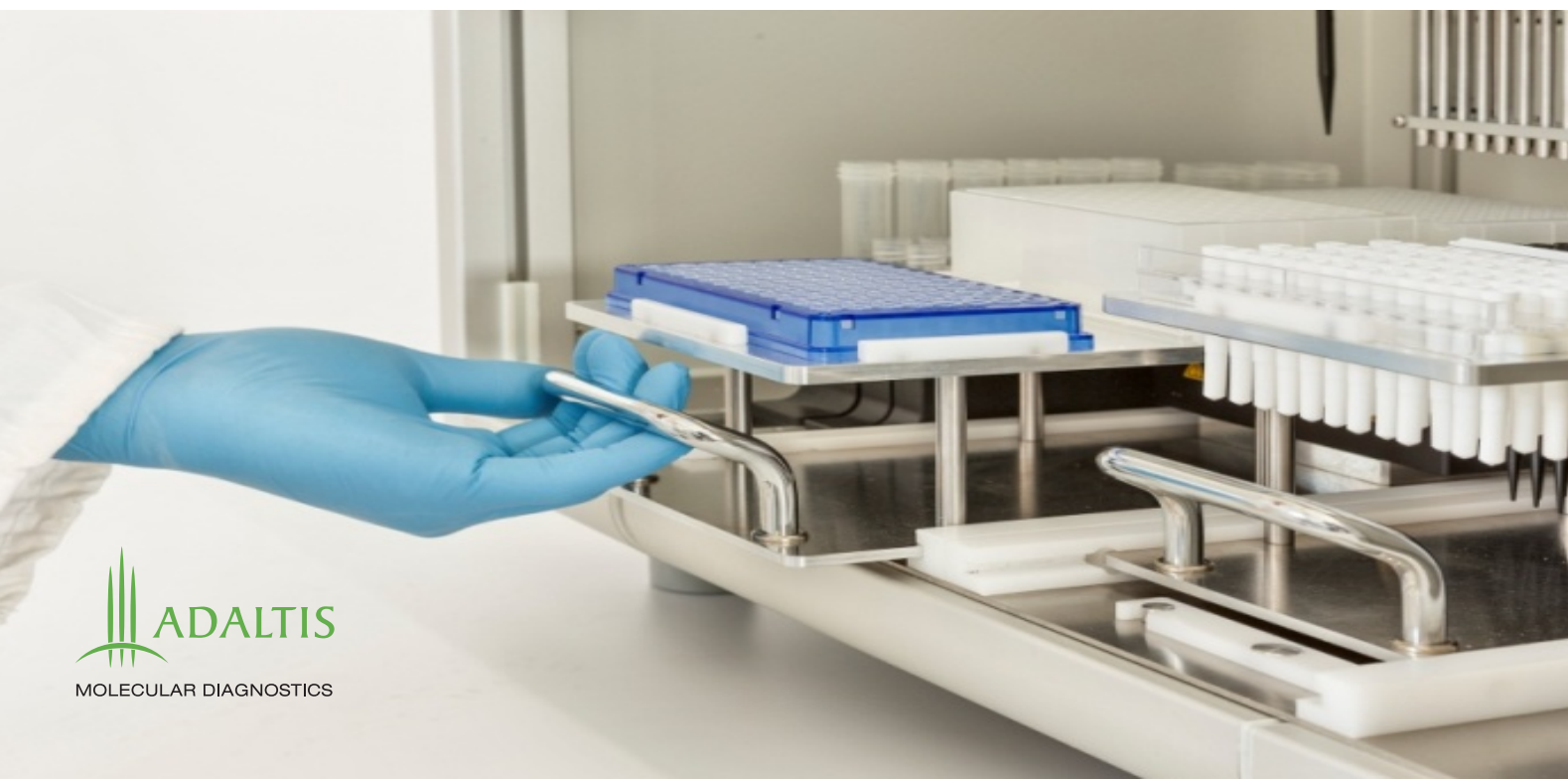
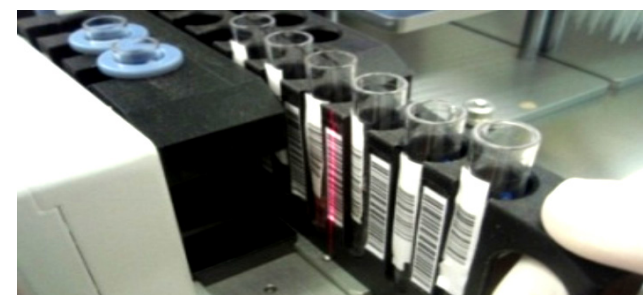
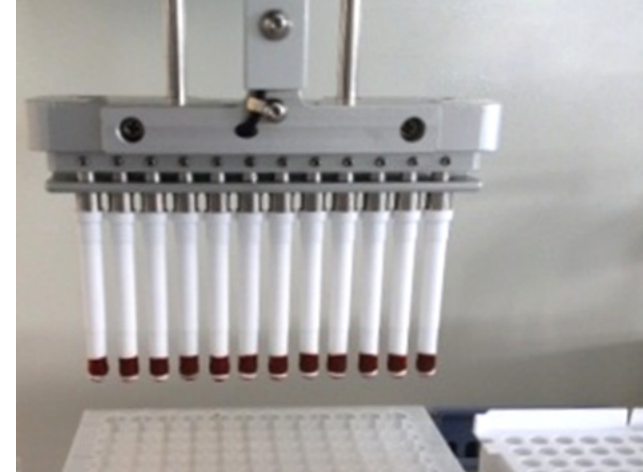
Advanced  
Automation  
in  
Molecular  
Biology

## EXTRAlab

Fully-automated Molecular Diagnostics instrument for clinical diagnostics  
A workstation for high quality Nucleic Acid isolation

- Nucleic Acids DNA / RNA Extraction
- PCR Purification
- PCR/qPCR Set-Up
- NGS Library Preparation





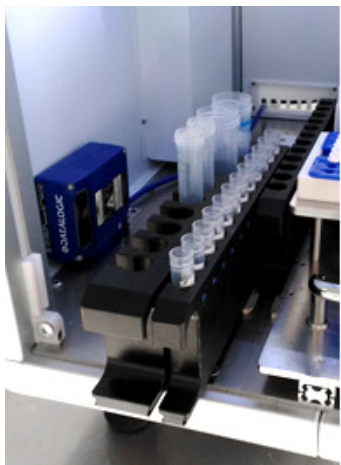


# EXTRA<sup>lab</sup> NGS prep

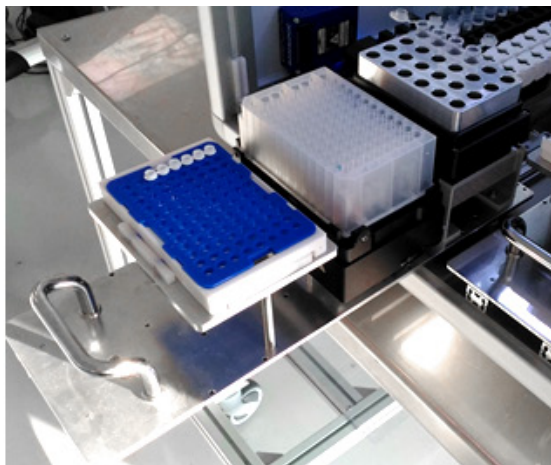
SAMPLE PROCESSING, NUCLEIC ACID EXTRACTION  
AND DOWNSTREAM ANALYSIS IN ONE STEP

## MAIN FEATURES & BENEFITS

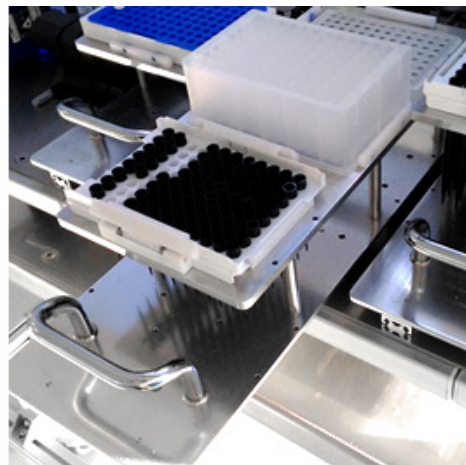
- Modular design - additional devices can be integrated
- Samples and reagents traceability with bar-code reader
- Reagent rack with autonomy up to 48 samples
- Time for the extraction: 48 samples - 118 minutes, PCR set-up - 22 minutes
- Elution volume: from 40µl to 200µl
- Possibility to use different protocols with auto-sampling, aliquoting and PCR set-up
- Easy maintenance and disinfection (UV lamp)
- Precision and repeatability of dispensing
- No cross contamination
- User-friendly software
- Wide range of customisable protocols
- Quick programming of every applicable protocol
- Easy protocol selection from libraries
- Remote monitoring of activities
- Customised configuration
- Decrease of human errors and infectious risk
- CE-IVD process



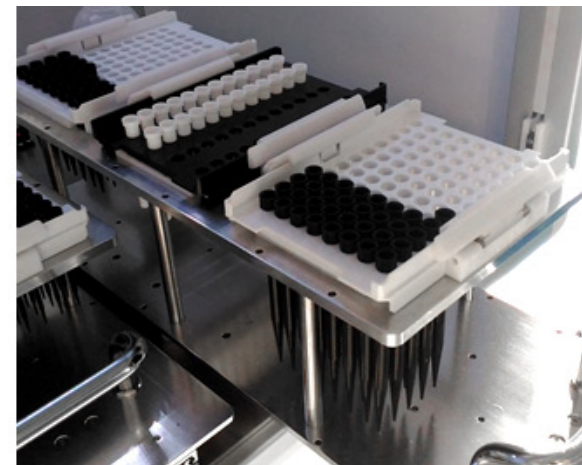
Ready to use reagents and up to 48 samples charging, integrated barcode reading for sample traceability.



Removable rack with temperature controlled zone for dedicated reagents (heating and cooling unit), thermoshaker (for sample lysis and elution) and PCR set-up plate.



Removable rack with washing step plates.



Removable rack with different sized tips and sheaths for the magnetic head.

## LIBRARY PREPARATION PROTOCOL



- MasterMix
- Up to 16 Patient Samples



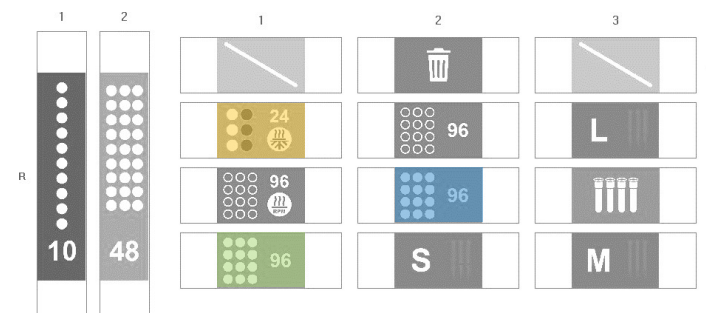
- Oligo Mix Primers, Indexes 1-96 (PCR Plate)
- CSV file



- qPCR plate or PCR tubes



- The CSV file contains the coordinates of the index plate
- The generated CSV file contains the coordinates of the index plate taken from each sample



## SAMPLE NORMALISATION AND LIBRARY POOLING

### BEAD PURIFICATION PROTOCOL



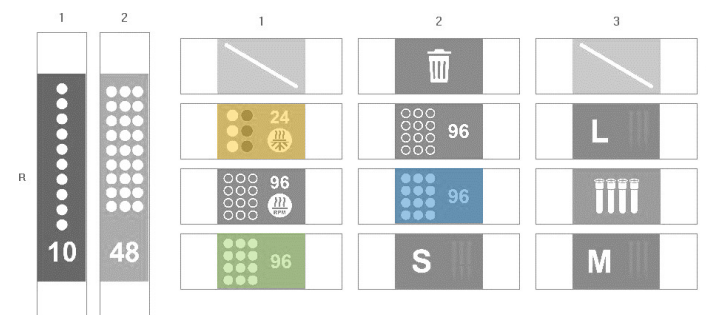
- Up to a maximum of 4 pre-normalized libraries
- Beads, Wash Buffer and Elution Buffer
- Eluates



- A single 2 ml deep-well plate on which the magnetic head allows the sample to be processed to elution

INPUT DATA

- Number of libraries to be purified
- Initial volume of each library



## QUANTIFICATION OF POOLED LIBRARY



- Up to a maximum of purified 4 libraries.
- Library dilution
- qPCR MasterMix, Library Specific Primers, Dnase/Rnase free H<sub>2</sub>O, Standards



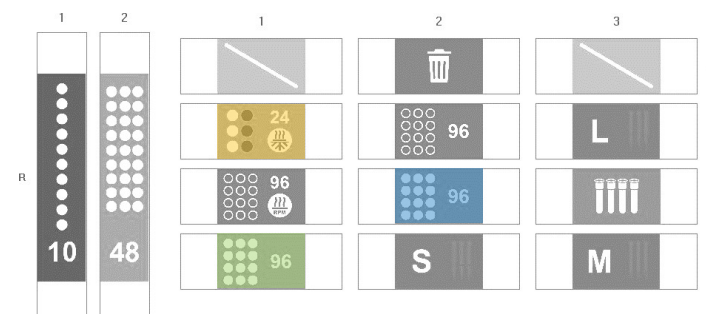
- Dilution Buffer



- qPCR plate or PCR tubes

INPUT DATA

- Number of libraries to be quantified





## TECHNICAL SPECIFICATIONS

### Multifunction robotic arm

Liquid handling tool

Magnetic tool with 24 parallel magnetic rods, suitable for all magnetic beads

PCR onboard mix preparation and PCR Plate setup

### Dispensing system

Pipetting via disposable conductive tips (with filters)

Capacitive liquid level sensing system

Volume range: 1 ÷ 1000 µL

CV < 0.2% at full stroke

### Units included

Deck layout compatible with SBS standard

Integrated Barcode Reader

Thermal shaker (RT ÷ 95°C; 100 ÷ 2500 rpm)

Cooling unit (4 ÷ 70°C)

UV light: 254nm (UV-C) - power 14W, life >1000h

Waste drawer

### Additional device on request

Thermal cycler (as a stand alone instrument)

### Consumables

- 2mL deepwell for lysis and elution
- 2mL deepwell for magnetic bead washing
- Primary tubes 16mm + 13mm + Eppendorf
- Conductive tips with filter (50µL, 200µL, 1000µL)
- Magnetic rod covers for bead transfer
- PCR tubes holder

### Control system

Internal control system and remote monitoring through HMI software PC and integrated touchscreen display

Tracking of samples with integrated database

### Power input

Single phase, 350W, 120 ÷ 250Vac, 50/60Hz

### Dimensions

Unpacked:  
800(W) x 752(D) x 731(H) mm / Weight: 96.5 kg

Packed:  
920(W) x 872(D) x 888(H) mm / Weight: 125 kg

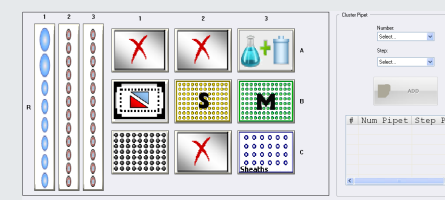


## SOFTWARE

EASY & INTUITIVE PROTOCOL GRAPHIC EDITOR

CONFIGURATION, PROGRAMMING & MONITORING SOFTWARE

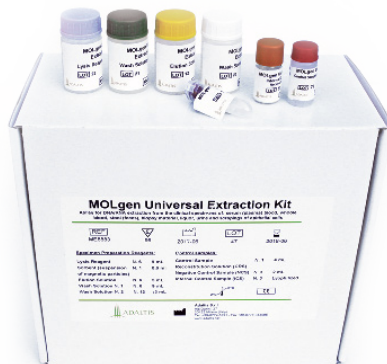
- Easy-to-use editor for quick programming
- Pre-set work cycles for different protocols
- User-friendly interface
- Sample traceability remote monitoring



# MOLgen

Molecular diagnostic panels and reagent kits for nucleic acid extraction and RT-PCR of infectious diseases and genomics

Standardised  
and easy  
approach  
to PCR  
Diagnostics



The Diagnostic kits of MOLgen series were developed for detection, confirmation and genotyping of infectious and genetics diseases by Real-Time PCR. The proprietary development enable us to provide you with a standardised, simple and readily reproducible procedure.

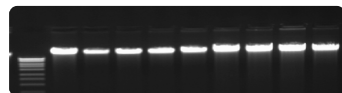
We provide convenient solutions in reagent configuration such as lyophilised, ready-to-use mixtures with a long shelf-life and the possibility to ship the kits at room temperature.

- NUCLEIC ACIDS UNIVERSAL EXTRACTION
- SAMPLE VALIDATION
- MULTI-RESPIRATORY & **SARS-CoV-2**
- HUMAN IMMUNODEFICIENCY VIRUS (HIV)
- BLOOD-TRANSMISSIVE INFECTIONS
- HEPATITIS
- TUBERCULOSIS
- TICK-BORNE INFECTIONS
- GASTROINTESTINAL INFECTIONS
- HUMAN HERPES VIRUSES
- TORCH INFECTIONS
- SEXUALLY TRANSMITTED INFECTIONS (STI)
- MULTIPLEX DETECTION OF STI
- HUMAN PAPILLOMA VIRUSES (HPV)
- VAGINAL BIOECENOSIS AND MICROFLORA
- CANDIDIASIS
- GENETICS

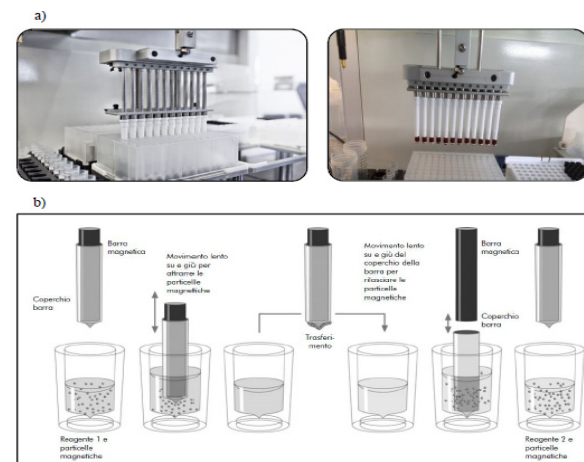


### EXTRA<sup>lab</sup> Results

High yield , purity and integrity  
of the nucleic acid extract



Starting Matrix	Yield Average (µgDNA/sample)	Purity Average (OD 260/280 nm)
Blood/saliva (200 µl)	~7 µg	1.9
Liver (15mg)	~60 µg	1.9
Lung (15mg)	~60 µg	1.9
Brain (15mg)	~70 µg	1.9
Kidney (15mg)	~40 µg	1.9
FFPE Brain (3 sect. da 5µm)	~1 µg	1.9



Extraction > PCR Purification > PCR set-up



For more information

**WWW.ADALTIS.NET**

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ADALTIS is certified in compliance with ISO9001 and ISO 13485.  
Our products are CE-IVD.

