

Bioneer

Healthier Future for
Humanity with
Genomic Technology

ExiPrep™ Dx

Fully Automated Nucleic Acid Extraction



ExiPrep™ 16 Dx



Fully Automated Nucleic Acid Extraction System

- Walk-away automation
- Reproducible, pipetting-free operation
- Pre-programmed and optimized protocols: Plug-and-Purify



Easy-to-use Touchscreen and TCP/IP Networking

The 3.5" touchscreen maximizes efficiency by offering an intuitive interface for operation such as selecting protocols and controlling the UV sterilization lamp. Multiple ExiPrep™ 16 Dx units can be operated in parallel with its TCP/IP network capability. In addition, with the Exicycler™ 96 Real-Time Quantitative Thermal Block, the centrally controlled molecular diagnostic platform ExiStation™ can be configured.



Pre-programmed Protocols

ExiPrep™ 16 Dx has pre-programmed protocols optimized for the target nucleic acid and clinical sample type. The system allows for up to 990 unique protocols, for optimal extraction conditions and outstanding results. With the release of new and improved kits, up-to-date protocols can be downloaded and updated through the network connection port.



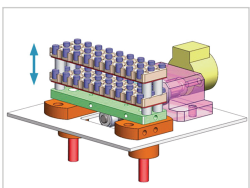
Pipetting-free operation

ExiPrep™ 16 Dx eliminates the greatest source of result variability: pipetting. By automatically pipetting the extracted nucleic acids directly into the diagnostic kit tubes, reproducibility is enhanced and the possibility of user-induced errors is eliminated.



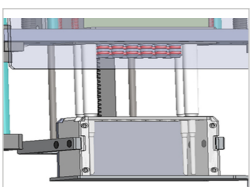
Contamination Shield

Sitted beneath the pipette when the ExiPrep™ 16 Dx is moving across the plate – eliminating the possibility of intra-assay cross-contamination.



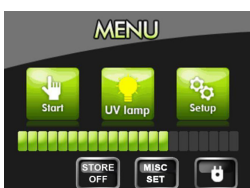
Built-in Heating & Magnetic Block

The ExiPrep™ 16 Dx includes a dual-purpose heating/magnetic block. The heating increases sample lysis efficiency and therefore maximizes extraction yield and purity. The magnetic block allows the beads to bind with greater affinity, allowing increased bead concentration and greater surface area for maximal nucleic acid binding and recovery.



Attachable Tip Guard

ExiPrep™ 16 Dx prevents even the smallest possibility of cross-contamination: convection-induced aerosol formation. Considering that a relatively high-concentration 10 picoliter droplet that is invisible to the naked eye is able to cause a significant false-positive result, the Tip Guard prevents this type of contamination from ever occurring.



Automatic UV-lamp Sterilization

The UV sterilization lamp can be set to sterilize the instrument chamber before and after extraction runs, thereby eliminating any concern of inter-assay cross-contamination.

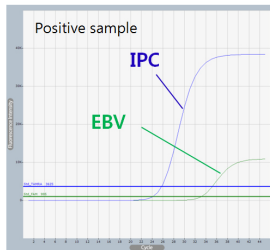
ExiPrep™ Dx Nucleic Acid Extraction Kit



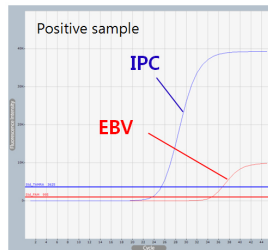
ExiPrep™ Dx Blood Viral DNA Kit NEW

Clinical specimen - Whole blood
MDx applications - CMV, EBV, etc.

- Quantitation of EBV viral load. Viral DNA was extracted from a positive sample using both **ExiPrep™ Dx Blood Viral DNA Kit** and **A company kit**, and real-time PCR was performed with **AccuPower® EBV Quantitative PCR Kit** on **Exicycler™ 96**



ExiPrep™ Dx Blood Viral DNA Kit



A company kit

	Bioneer	A company
panel 200 IU/ml	37.32	38.20
panel 500 IU/ml	35.44	36.42
panel 5000 IU/ml	32.04	33.35
Positive sample	33.1	34.75

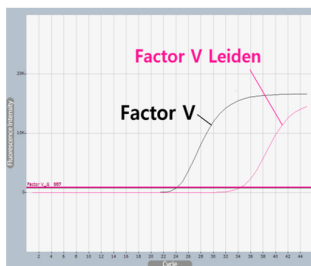
<Ct value>



ExiPrep™ Dx Blood Genomic DNA Kit

Clinical specimen - Whole blood
MDx applications - Human genotyping; ApoE, HLA-B27, JAK2 V617F, MTHFR (C677T, A1298C), etc.

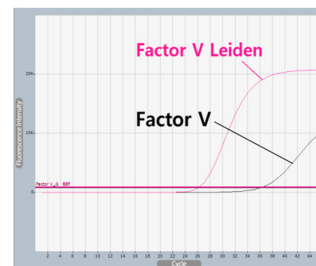
- Factor V SNP (g. 1691G>A) analysis. Genomic DNA was extracted from human whole blood using **ExiPrep™ Dx Blood Genomic DNA Kit**, and real-time PCR was performed with **AccuPower® Factor V Leiden Real-Time PCR Kit** on **Exicycler™ 96**



Wild type (GG)



Hetero type (G/A)



Mutant (AA)



ExiPrep™ Dx Mycobacteria Genomic DNA Kit

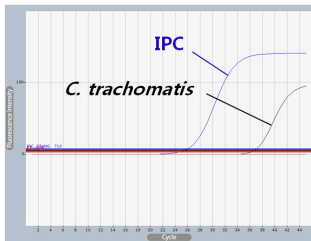
Clinical specimen - Cultured bacteria, sputum, swab, BAL, etc.
MDx applications - TB, NTM, TB & MDR, pneumonia, etc.



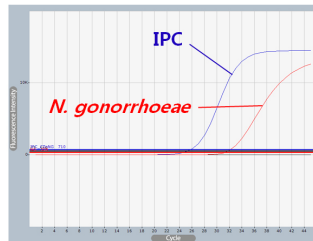
ExiPrep™ Dx Bacteria Genomic DNA Kit

Clinical specimen - Cultured bacteria, urine, sputum, swab, BAL, etc.
MDx applications - STI, TB, NTM, pneumonia, food-borne bacteria, etc.

- STI diagnosis. Bacterial genomic DNA was extracted from human urine using **ExiPrep™ Dx Bacteria Genomic DNA Kit**, and real-time PCR was performed with **AccuPower® CT & NG Real-Time PCR Kit** on **Exicycler™ 96**.



Chlamydia Positive Sample



Gonorrhea Positive Sample

Bacterial genomic DNA extracted from human urine or genital sample is applicable for multiple STI diagnosis.

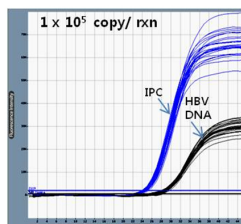
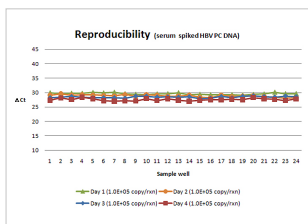


ExiPrep™ Dx Viral DNA/RNA Kit

ExiPrep™ Dx Viral DNA Kit / ExiPrep™ Dx Viral RNA Kit

Clinical specimen - Plasma, serum, stool, swab, cerebrospinal fluid (CSF), BAL, etc.
MDx applications - HBV, HCV, HIV, CMV, EBV, BKV, Norovirus, Enterovirus, respiratory virus, etc.

- Quantitation of HBV viral load. Viral DNA was extracted from human serum using **ExiPrep™ Dx Viral DNA Kit**, and real-time PCR was performed with **AccuPower® HBV Quantitative PCR Kit** on **Exicycler™ 96**.



(A) The reproducibility chart shows the results of 24 preps of a single concentration of HBV positive DNA (1×10^5 copies /test) performed by 3 operators during 4 days.

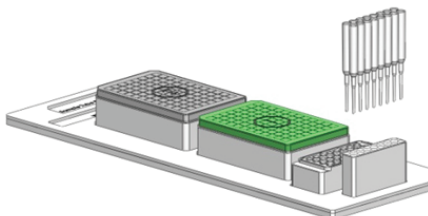
(B) Equivalent level of purification yield was verified during 4 days at a single concentration of HBV.

Average Ct value: 28.60, SD: 0.8, CV(%): 1.17

Workflow

Step 1

Consumable Set-up & Sample Loading



Step 2

Mounting on ExiPrep™ 16 Dx



Step 3

Instrument Running



- **ExiPrep™ Dx Blood Viral DNA Kit**

The kit is designed to extract high-yield, high-purity viral DNA from whole blood without an additional specimen pre-treatment procedure.

- **ExiPrep™ Dx Blood Genomic DNA Kit**

The kit is designed to extract high-yield, high-purity genomic DNA from whole blood without an additional specimen pre-treatment procedure.

- **ExiPrep™ Dx Bacteria Genomic DNA Kit**

The kit utilizes a resuspension buffer that efficiently disrupts cells and proteins for the extraction of high-purity bacteria genomic DNA from cultured bacteria or clinical specimens.

- **ExiPrep™ Dx Mycobacteria Genomic DNA Kit**

The kit is optimized for the extraction of mycobacterium species genomic DNA from clinical specimens. EZ solution, easy sputum liquifying solution, is optionally provided with the kit for the efficient and easy sputum pre-treatment. Just add EZ solution to sputum!

- **ExiPrep™ Dx Viral DNA/RNA Kit**

The kit is designed to extract both viral DNA and RNA from serum, plasma, CSF, saliva, swab and cell free body fluid samples using the automated nucleic acid extraction instrument ExiPrep™16 Dx.

- **ExiPrep™ Dx Viral DNA Kit**

The kit is designed to extract high-purity viral DNA from serum, plasma, CSF, saliva, swab and cell free body fluid samples.

- **ExiPrep™ Dx Viral RNA Kit**

The kit is optimized for the extraction of viral RNA and includes carrier RNA in the buffer cartridge to prevent RNA degradation.

Specification of ExiPrep™ 16 Dx

Dimensions (mm)	320 (W) x 500 (H) x 535 (D) 12.6in(W) x 19.69in(H) x 21.06in(D)
Weight	27 kg (59.53 lbs)
Operating temperature	15 – 30°C (59 - 86°F)
Operating humidity	20 - 80%, no condensation
Operating system	Standalone or PC
Electrical (Voltage / Frequency)	Adaptor: AC Input: 100-240VAC, 2.3-0.8A, 50/60Hz, DC Output: 24VDC, 7.5A Instrument: DC Input: 24VDC, 7.5A
Network support	TCP/IP protocol
User interface	320 x 240 touch screen TFT LCD, 18 bit color
Heating Block	40-90°C
Cooling Block	4°C



ExiPrep™ 16 Dx

Ordering Information

Cat. no.	Product Name	Q'ty
A-5050	ExiPrep™ 16 Dx Fully Automated Nucleic Acid Extraction System	
K-4411	ExiPrep™ Dx Blood Genomic DNA Kit	96 preps
K-4414	ExiPrep™ Dx Bacteria Genomic DNA Kit	96 preps
K-4418	ExiPrep™ Dx Mycobacteria Genomic DNA Kit	96 preps
K-4471	ExiPrep™ Dx Viral DNA/RNA Kit	96 preps
K-4472	ExiPrep™ Dx Viral DNA Kit	96 preps
K-4473	ExiPrep™ Dx Viral RNA Kit	96 preps
K-4474	ExiPrep™ Dx Blood Viral DNA Kit	96 preps

ExiPrep™ is a trademark of Bioneer Corporation

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Contact Us

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