

**Essential Functionality, Enhanced Performance** 



# Easy Installation, Easy-to-Use, Easy-to-love:

## Why ExiPrep™ 16Plus?•••

- Walk-away automation
- Pre-programmed methods: simply "Plug-and-Purify"
- Cost/sample equivalent to manual methods

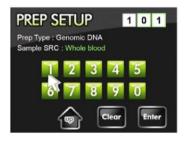
#### Easy-to-use Touchscreen

The 3.5" touchscreen maximizes efficiency by offering an intuitive interface for operation such as selecting protocols and controlling the UV sterilization lamp.



#### **Pre-programmed Protocols**

ExiPrep™ 16Plus has pre-programmed protocols optimized for the target nucleic acid and clinical sample type. The system allows for up to 990 unique protocols, allowing for optimal extraction conditions and outstanding reproducibility.



#### **Automatic UV-lamp Sterilization**

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

#### **Proprietary Silica Magnetic Beads**

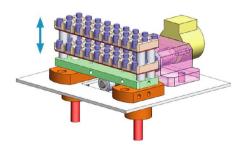
The silica magnetic beads in our extraction kits were specially developed to maximize DNA/RNA binding efficiency, allowing for maximum recovery. (Patent Pending)

#### **Built-in Contamination Shield**

Sits beneath the pipette tips when the ExiPrep™ 16Plus is moving across the plate - eliminating the possibility of intra-assay cross-contamination.

#### **Built-in Heating & Magnetic Block**

The ExiPrep™ 16Plus 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 without well-to-well movement, increasing bead concentration and therefore binding surface area for maximal nucleic acid recovery.



## Automated DNA/RNA Purification

## Why ExiPrep™ 16Plus? •••

- Plug-and-Play installation and operation
- From sample to pure DNA/RNA in 60 minutes
- Increased productivity, reproducibility, and reliability
- Compact & space saving model

### ExiPrep™ 16Plus Workflow



### **Applications**

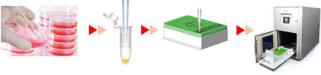
- University and Corporate Laboratories: Nucleic acid extraction and protein purification from various samples
- Hospital/Clinic Laboratories: Nucleic acid extraction from blood, tissue, sputum etc. for various molecular diagnostic tests
- Food companies: Preparation of food samples for GMO or contamination testing
- Military, Police: Sample preparation for bio-defense detection of various bacteria and viruses
- Public Health Offices: Sample preparation for public health threats such as STDs and tuberculosis

### **Experimental Data**

#### 1. Genomic DNA/ Cultured cell (HeLa)

- Sample volume: 1X10<sup>6</sup> cells
- Protocol number: 107
- Total prep time: < 1hr.</li>
- Average yield: 4-8ug

#### Procedure



Sample loading

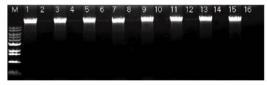
Cell culture

Sampling

Genomic DNA Extraction

Extraction

• Agarose gel analysis

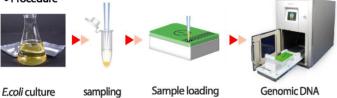


Lanes 1,3,5,7,9,11,13,15 were extracted with 1X10<sup>6</sup> cells of cultured HeLa cell and Lanes 2, 4, 6, 8, 10, 12, 14, 16 were extracted with ddH<sub>2</sub>O as a negative control in DNA extraction. Note all samples have very similar yields. Purity was also tested and was consistently between 1.8 and 2.0 (not shown).

#### 2. Genomic DNA/ Bacteria (E.coli)

Sample volume: 1X10<sup>6</sup> cells
 Protocol number: 109
 Total prep time: <1 hr</li>
 Average yield: 8-12ug

#### Procedure



Agarose gel analysis

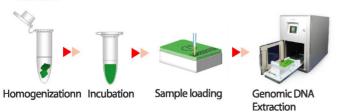


Lanes 1,3,5,7,9,11,13,15 were extracted with 1X10<sup>6</sup> cells of *E.coli* cells and Lanes 2, 4, 6, 8, 10, 12, 14, 16 were extracted with ddH2O as a negative control in DNA extraction. Note all samples have very similar yields. Purity was also tested and was consistently between 1.9 and 2.0 (not shown).

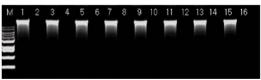
#### 3. Genomic DNA/ Plant Tissue (Spinach leaf)

- Sample volume: 100mg
- Protocol number: 104
- Total prep time: <1 hr</li>
- Average yield: 3-5ug

#### Procedure



#### Agarose gel analysis



Lanes 1,3,5,7,9,11,13,15 were extracted with 100mg of spinach leaves and Lanes 2,4,6,8,10,12,14,16 were extracted with ddH<sub>2</sub>O as a negative control in DNA extraction. Note all samples have very similar yields. Purity was also tested and was consistently between 1.9 and 2.0 (not shown).

## **Related Products**

Kit	Cat. No.	Sample Sources
Genomic DNA		
ExiPrep™ Blood Genomic DNA Kit (96 preps)	K-3215	Whole Blood (200 ul) Buffy coat (200 ul) Urine (200 ul)
ExiPrep™ Tissue Genomic DNA Kit (96 preps)	K-3225	Liver, Lung, Kidney, Spleen (25 mg) Mouse tail (1.0 cm) Rat tail (0.5 cm)
ExiPrep™ Cell Genomic DNA Kit (96 preps)	K-3235	Cultured Cell (1X10° cells) Yeast (1X10° cells) E. coli (1X10° cells)
ExiPrep™ Bacteria Genomic DNA Kit (96 preps)	K-3245	Gram (-) bacteria (1X10° cells) Gram (+) bacteria (1X10° cells)
ExiPrep™ Plant Genomic DNA Kit (96 preps)	K-3255	Plant tissue (25 mg) Seed (25 mg)
Total RNA		
ExiPrep <sup>™</sup> Blood RNA Kit (96 preps)	K-3315	Whole Blood (200 ul) Buffy coat (200 ul) Urine (200 ul)
ExiPrep™ Tissue RNA Kit (96 preps)	K-3325	Liver, Lung, Kidney, Spleen (25 mg) Mouse tail (1.0 cm) Rat tail (0.5 cm)
Viral DNA/ RNA		
ExiPrep™ Viral DNA/ RNA Kit (96 preps)	K-3535	Serum & Plasma (200 ul) Urine, CSF and cell free body fluid (200 ul) Swabs

## Coming soon...

Kit	Cat. No.	Sample Sources
Total RNA		
ExiPrep™ Blood Total RNA Kit (96 preps)	K-3315	Whole Blood Buffy coat
ExiPrep™ Tissue Total RNA Kit (96 preps)	K-3325	Liver, Lung, Kidney, Spleen Mouse tail Rat tail
ExiPrep™ Plant Total RNA Kit (96 preps)	K-3355	Plant tissue Seed

## ExiPrep™ 16Plus Nucleic Acid Extraction Kit Configuration









Disposable Filter Tip

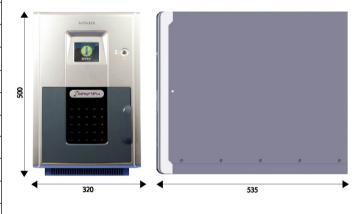
0.5 ml Reaction Tube

**Elution Tube** 

Buffer Cartridge

## **Specifications**

Dimensions (WXHXD)	320 mm x 500 mm x 535 mm
Weight	18 kg
Temperature range	15-30°C
Humidity range	20-80%, no condensation
Operating system	Built-in
User interface	320 x 240 touch screen graphic LCD
Input voltage	110 - 220 VAC
Frequency	50 / 60 Hz
UV sterilization	5 minute cycle, 48.96 mJ/cm energy max 2
Communications	TCP/IP
Heat block	40 - 95 ℃
Cool block	4℃



### **Contact**

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