

Nucleic acid extraction made easy

# CLEO™ AP48

- High throughput up to 48 samples/run
- Magnetic bead-based method
- Excellently efficient extraction
- Easy-to-use
- Intuitive software and Integrated vision system
- Low-noise design ( $\leq 60$  dB)



# Advantages of CLEO™ AP48

CLEO™ AP48 is an automated system that utilizes magnetic particle technology to extract high-purity nucleic acids efficiently. Featuring a user-friendly interface, intuitively designed software, and a built-in touchscreen display, the system ensures ease of use. It supports the simultaneous extraction of high-purity nucleic acids from up to 48 samples, compatible with a wide range of extraction kits.

## ○ Innovative design & convenience

- CLEO™ AP48 features an innovative design with ultra-quiet operation, thanks to its specially engineered motor control system.
- With an intuitive user interface and optimized user-friendly workflow, the system enables fast and effortless nucleic acid extraction.



## ○ Magnetic bead based extraction

Nano-magnetic beads ensure precise and selective extraction of target DNA or RNA, delivering high-purity results every time.



## ○ Convenient usability

The sliding rack design enhances user convenience.



## ○ Wide selection of cartridge

Flexible cartridge options from 1 to 16 preps enhance usability and adapt to your workflow needs.



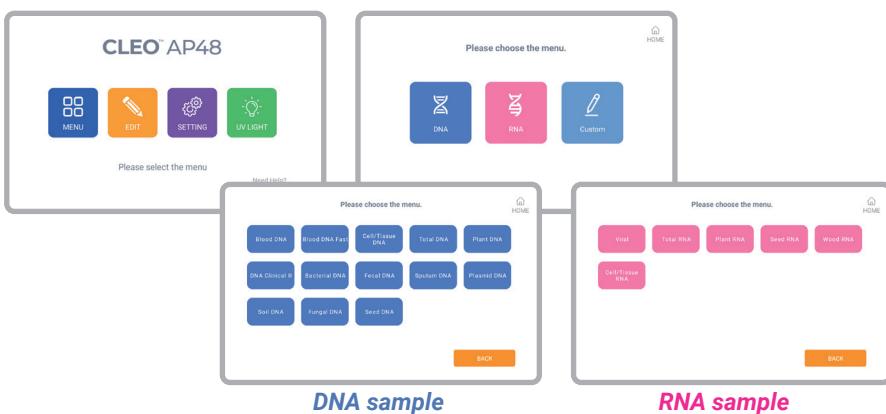
6-well Strip  
(For single prep/run)



96-well Plate  
(For 16 prep/run)

# Intuitive interface software and excellent extraction efficiency thanks to optimal extraction conditions.

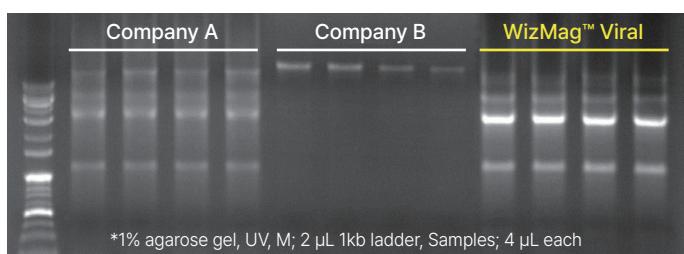
CLEO™ AP48 software serves an intuitive customizable design and easy-to-use open platform system integrated into the 10-inch-touch screen.



## ○ Performance comparison test result

### Comparison test for Total RNA extraction efficiency

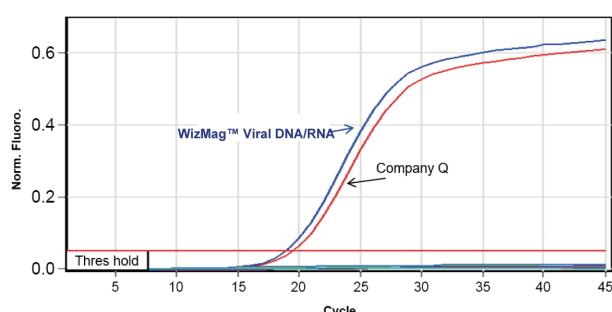
- Sample: Hela cells,  $1 \times 10^6$  cells/prep
- Elution volume: 100  $\mu\text{L}$
- Reagent : WizMag™ Viral DNA/RNA Kit
- Results: Extraction of WizMag™ Viral DNA/RNA showed higher yield and purity compared to competitors.



| Company       | Conc.(ng/ $\mu\text{L}$ ) | 260/280 nm | 260/230 nm |
|---------------|---------------------------|------------|------------|
| Company A     | 59.656                    | 2.04       | 1.82       |
| Company B     | 27.672                    | 1.97       | 1.47       |
| WizMag™ Viral | 134.775                   | 2.05       | 2.06       |

### Comparison test for COVID-19 virus detection

- Provides faster Ct value and higher purity compared to competitors.
- Real-time PCR conditions : Taqman probe based real-time RT-PCR, Threshold : 0.05 (fixed)



| Company       | RNA conc.              | A260/280 | Ct value |
|---------------|------------------------|----------|----------|
| Company Q     | 46.2 ng/ $\mu\text{L}$ | 1.85     | 19.59    |
| WizMag™ Viral | 56.1 ng/ $\mu\text{L}$ | 1.97     | 18.96    |

## ○ Specifications

|                         |   |
|-------------------------|---|
| Number of samples       | 1 to 48 samples                                     |
| Extraction method       | Magnetic bead-based extraction                      |
| Operation temperature   | 10-35°C (50-95°F)                                   |
| Operating humidity      | 20-80% relative, non-condensing                     |
| Sample volume           | 200 - 300 µL  |
| Extraction time         | 20 - 30 min.  |
| Operating system        | Android OS  |
| Display                 | 10.1 inch full-color HD LCD capacitive touch screen |
| Protocol storage        | Pre-loaded protocols for WizMag Kits                |
| Noise                   | ≤ 60 dB   |
| Input power / Max power | 100 - 240 VAC (50/60 Hz) / 510W                     |
| Dimensions (LxWxH)      | 530 × 480 × 490 mm                                  |
| Weight                  | 35 kgs  |

## ○ Ordering information

| Cat No. | Product                                     |
|---------|---|
| CL2048  | CLEO™ AP48 Automated Nucleic Acid Extractor |

### Extraction kits

| Product Name            | 96-well plate type                  | 6-well strip type                  | Description                           |
|-------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| WizMag™ Total DNA       | W7000 (64 prep)<br>W7001 (192 prep) | W7002 (32 prep)<br>W7003 (96 prep) | Cell, Body fluids                     |
| WizMag™ Blood DNA       | W7010 (64 prep)<br>W7011 (192 prep) | W7012 (32 prep)<br>W7013 (96 prep) | Blood                                 |
| WizMag™ Cell/Tissue DNA | W7040 (64 prep)<br>W7041 (192 prep) | W7042 (32 prep)<br>W7043 (96 prep) | Cell, Tissue                          |
| WizMag™ Viral DNA/RNA   | W7020 (64 prep)<br>W7021 (192 prep) | W7022 (32 prep)<br>W7023 (96 prep) | Virus                                 |
| WizMag™ Bacterial DNA   | W7110 (64 prep)<br>W7111 (192 prep) | W7112 (32 prep)<br>W7113 (96 prep) | Gram(-)bacteria,<br>Gram(+) bacteria  |
| WizMag™ Total RNA       | W7070 (64 prep)<br>W7071 (192 prep) | W7072 (32 prep)<br>W7073 (96 prep) | Cell, Body fluids                     |
| WizMag™ Total RNA Plus  | W7074 (64 prep)<br>W7075 (192 prep) | W7076 (32 prep)<br>W7077 (96 prep) | Cell, Body fluids                     |
| WizMag™ Cell/Tissue RNA | W7090 (64 prep)<br>W7091 (192 prep) | W7092 (32 prep)<br>W7093 (96 prep) | Cell, Tissue                          |
| WizMag™ DNA Clinical II | W7200 (64 prep)<br>W7201 (192 prep) | W7202 (32 prep)<br>W7203 (96 prep) | Cultured cells, swabs,<br>body fluids |
| WizMag™ Sputum DNA      | W7130 (64 prep)<br>W7131 (192 prep) | W7132 (32 prep)<br>W7133 (96 prep) | Sputum, TB                            |

