



Supporting FDA-approved
infectious disease screening



LabTurbo

Automated systems for
DNA/RNA applications

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Research
and Diagnostic Products



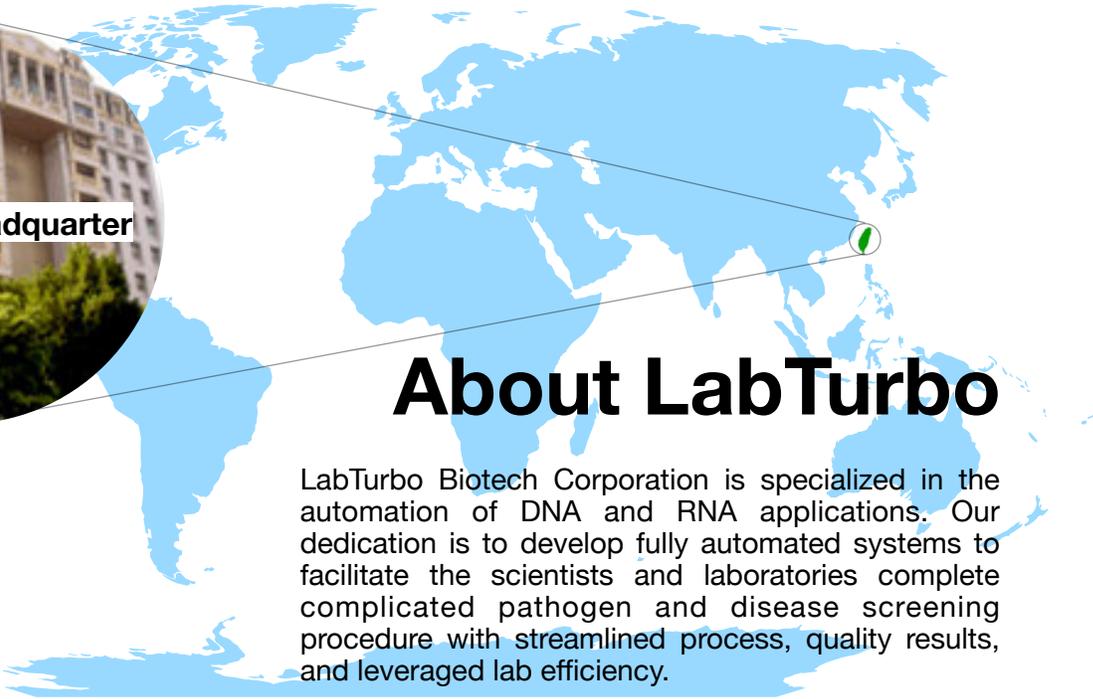
GMP

ISO
13485





LabTurbo Headquarter



About LabTurbo

LabTurbo Biotech Corporation is specialized in the automation of DNA and RNA applications. Our dedication is to develop fully automated systems to facilitate the scientists and laboratories complete complicated pathogen and disease screening procedure with streamlined process, quality results, and leveraged lab efficiency.

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Since 1992, we have solely focused on the technologies and innovations for DNA/RNA extraction, complete application automation, delicate liquid-handling and integration of various DNA/RNA related knowledges and technologies.

With more than 27 years of experience, we successfully developed various automated systems and kits for the wide selections of applications and customer satisfaction.

LabTurbo systems are now supporting FDA-approved nucleic acid testing for infectious disease screening in US blood supply.



Automation system manufacturing plant



Reagent manufacture clean room



P2 Laboratory



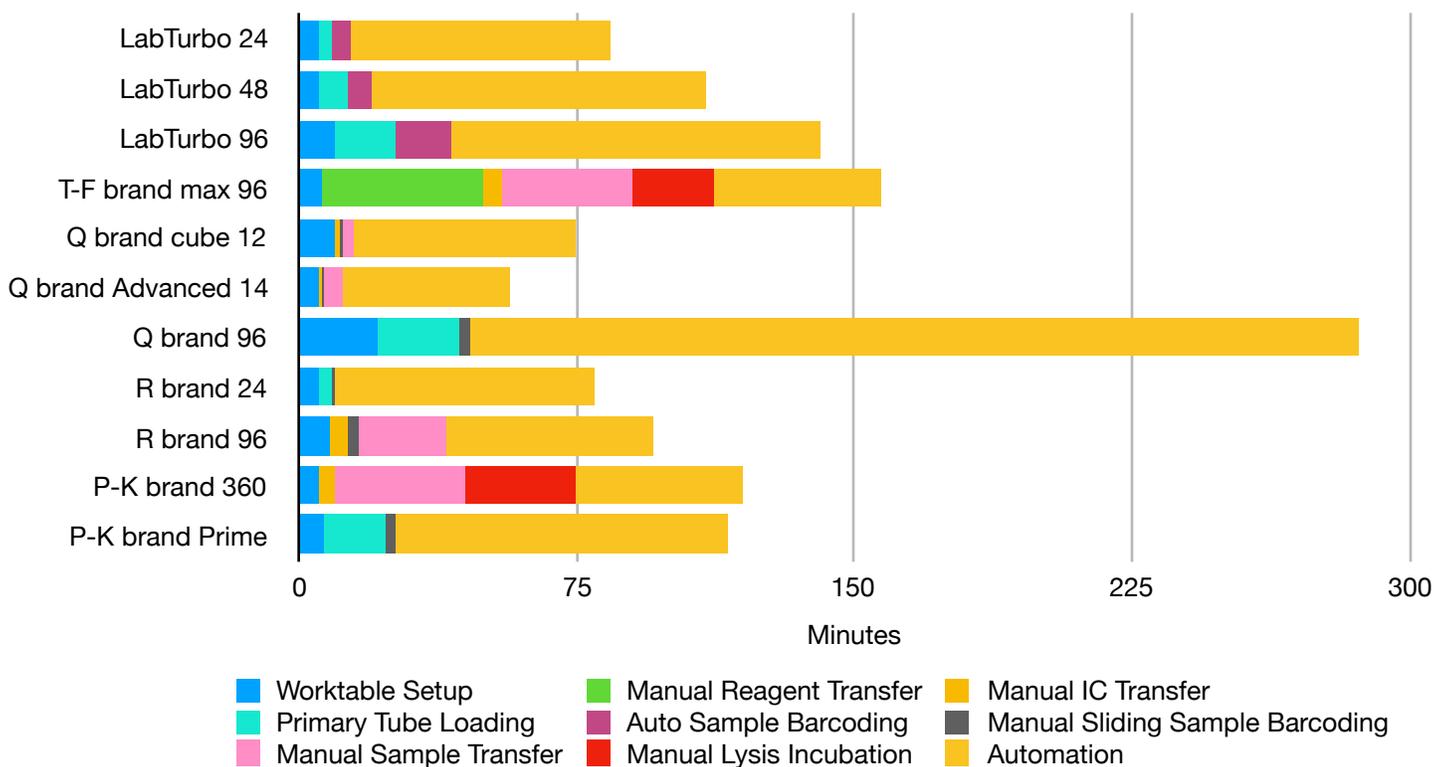
Large volume reagent preparation system

Why LabTurbo?

True walkaway system with complete automation and liquid-handling functions

| | LabTurbo | R brand | Q brand | P-K brand | T-F brand |
|--------------------------------|----------|-------------------------------------|-------------------------------------|-----------|-----------|
| Auto Barcode | v | Manual sliding Only for 24 model | Manual sliding Only for 96 model | x | x |
| Sampling from primary tube | v | Only for 24 model | Only for 96 model | x | x |
| Auto reagent filling | v | Pre-filled with fixed volume | Pre-filled with fixed volume | v | x |
| Internal control (IC) addition | v | Only for 24 model | Only for 96 model | x | x |
| Heat lysis on deck | v | v | v | x | x |
| DNA/RNA binding | v | v | v | v | v |
| Eluate to plate transfer | v | x | x | x | x |
| PCR setup | v | x | x | x | x |

More automation, less hands-on time, faster DNA/RNA extraction



Procedure: worktable setup, load sample or primary tube, sample barcoding, IC addition, sample lysis, DNA/RNA purification. Based on 300 ul whole blood extraction at full run capacity of each system.

Why LabTurbo?

Complete diagnostic procedure automation with LabTurbo AIO



Auto-barcoding Auto-sampling

DNA/RNA
extraction

PCR Setup

Real-time PCR

Result analysis

← Fully integrated procedure →

Sample-to-result procedures for HIV/HBV/HCV/HPV detection, infectious disease screening, cancer detection, non-invasive prenatal diagnosis (NIPD), methylated DNA detection and many more.

Reliable purification technology and versatility

Purification technology:

LabTurbo systems use **individual membrane column and vacuum technology** to provide consistent and reliable DNA/RNA purification.

Wash-away purification style successfully eliminates PCR inhibitor carry-over and achieves superb impurity removal.

Comprehensive impurity removal makes LabTurbo excellent for challenging sample types such as stool, urine, soil, etc.



Versatility:

LabTurbo systems are suitable for extracting **genomic DNA, total RNA, CtDNA, CfDNA, bacterial DNA, viral DNA/RNA and micro RNA** from various sample types.

Up to **3 ml** of sample volume for enhanced sensitivity. Flexible sample numbers for all throughputs.

6-channel real-time PCR system (**FAM, HEX, ROX, Cy5, TAMRA & Quasar 705**) compatible with commercial qPCR kits.

True user-friendly design

LabTurbo automation is designed for users to use the least time and effort to reach maximum productivity. User-friendly designs include 1. Worktable setup in less than 10 minutes, 2. Automatic sample and reagent transfer (no manual sample or reagent transfer needed), 3. 6-strip consumable format for quick setup.

Quick worktable setup in 10 minutes



Filter tips

Proteinase K

Column sets

Elution tubes

Sample tubes

Samples

PCR tube & cap

Why LabTurbo?

Advanced robotics & documentation for reliable and consistent results



Accurate liquid and object handling with embedded object sensor, ultrasonic sensor, and CV<5% pipetting system. Real-time photo capture and system log documentation record all the run details for full operation traceability.

Publications



The NEW ENGLAND
JOURNAL of MEDICINE

Screening for Babesia microti in the U.S. Blood Supply

N Engl J Med (2016;375:2236-45.)

89,135 blood samples tested with LabTurbo systems.



Incidence and Factors Associated with False Positives in Laboratory Diagnosis of Norovirus Infection by Amplification of the RNA-Dependent RNA Polymerase Gene

September 2014 | Volume 9 | Issue 9 |

Stool Norovirus detection with LabTurbo system.



Emerged HA and NA Mutants of the Pandemic Influenza H1N1 Viruses with Increasing Epidemiological Significance in Taipei and Kaohsiung, Taiwan, 2009–10

February 2012 | Volume 7 | Issue 2

Influenza H1N1 extraction with LabTurbo system.

TRANSFUSION

Investigational screening for Babesia microti in a large repository of blood donor samples from nonendemic and endemic areas of the United States

TRANSFUSION 2014;54:2226-2236.

13,269 blood samples tested with LabTurbo.



Human Papillomavirus-16 Infection in Advanced Oral Cavity Cancer Patients Is Related to an Increased Risk of Distant Metastases and Poor Survival

July 2012 | Volume 7 | Issue 7 |

HPV detection with LabTurbo system.



Use of simple clinical and laboratory predictors to differentiate influenza from dengue and other febrile illnesses in the emergency room

BMC Infectious Diseases 2014, 14:623|

Influenza diagnostics with LabTurbo system.

LabTurbo

SP-qPCR All-in-one System Sample-to-result DNA/RNA Testing Platform



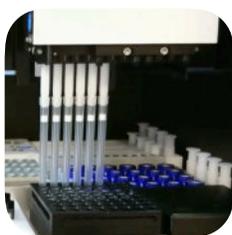
Auto-barcoding



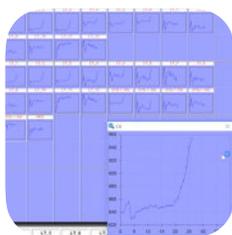
Auto-sampling



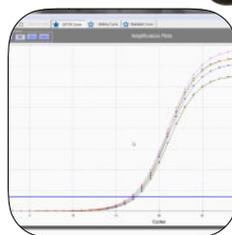
DNA/RNA
extraction



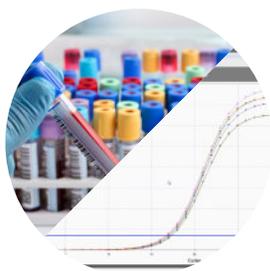
PCR Setup



Real-time PCR



Result analysis



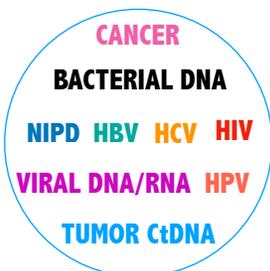
Sample-to-result procedure:

LabTurbo AIO automates the complete nucleic acid testing procedure. Get qPCR results and analysis in 3 hours.



Leverage lab efficiency:

Sample-to-result procedure greatly improves the productivity and lab efficiency while eliminating human handling errors and variances.



Versatile detections:

LabTurbo AIO is compatible with commercial qPCR kits with 6 excitation channels for various target detection and applications.



Cost-effective:

LabTurbo AIO provides reliable and consistent results with streamlined schedule, saving you time, effort, space and valuable lab resource.

Function:

1. Sample-to-result DNA/RNA testing: auto-barcoding, sampling, DNA/RNA purification, PCR setup, qPCR, result analysis (qPCR curve plotting, CT value, melting curve) (functions can be used separately)
2. "Cherry picking" user-defined PCR setup with Excel
3. User-defined qPCR setup (serial dilution, master mix volume, FAM, HEX, ROX, Cy5, TAMRA, Quasar 705)
4. Master mix preparation from components (with cooling function 10 ± 2 °C)
5. UV light sterilization, 10% bleach applicable



LabTurbo

Cancer Gene Methylation Detection System

Sample-to-result epigenetic cancer biomarker detection

Auto sample
barcoding

Primary tube
sampling

DNA/RNA
purification

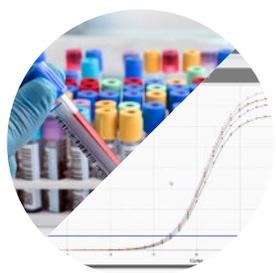
Bisulfite
conversion

PCR
Setup

Real-time
PCR

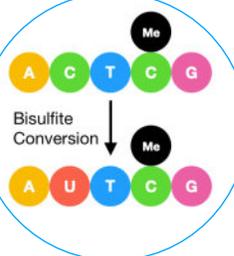
Methylated gene
identification

Fully automated cancer biomarker detection



Sample-to-result procedure:

LabTurbo AIO automates the whole methylated cancer biomarker detection procedure. Get from sample to report in 3 hours.



Auto bisulfite conversion:

LabTurbo AIO automates the complicated bisulfite conversion procedure, including deamination, desulphonation, PCR amplification, and gene methylation identification.



Leverage lab efficiency:

Sample-to-result procedure greatly improves the productivity and lab efficiency while eliminating human handling errors and variances.



Cost-effective:

LabTurbo AIO provides reliable and consistent results with streamlined operation, saving you time, effort, space and valuable lab resource.

Function:

1. Sample-to-result methylated gene and biomarker identification: auto-barcoding, sampling, DNA/RNA purification, bisulfite conversion, PCR setup, qPCR, result analysis
2. "Cherry picking" user-defined PCR setup with Excel
3. User-defined qPCR setup (serial dilution, master mix volume, FAM, HEX, ROX, Cy5, TAMRA, Quasar 705)
4. Master mix preparation from components (with cooling function $10 \pm 2^\circ\text{C}$)
5. Compatible with commercial DNA methylation detection kits
6. UV light sterilization, 10% bleach applicable



Specification

| Model | AIO24D-064 | AIO24S-128 | AIO24S-384 | AIO12SBC-144 |
|-----------------------------------|---|---|----------------|---|
| Retail price | \$80,000 | \$100,000 | \$120,000 | \$120,000 |
| Sample number | 1-24 | 1-24 | 1-24 | 1-12 |
| Max sample volume | 0.3-1 ml | 0.3-2 ml | 0.3-2 ml | 0.3-4 ml |
| qPCR wells | 1-64 | 1-128 | 1-384 | 1-144 |
| Style | Bench-top | Bench-top | Floor-standing | Floor-standing Bisulfite conversion |
| Size (cm) | 107 x 65 x 96 | 120 x 65 x 96 | 66 x 64 x 160 | 66 x 64 x 160 |
| Weight (kg) | 200 | 200 | 220 | 220 |
| Throughput | 24 samples in 3 hour (up to 0.5 ml sample volume, 40 qPCR cycles) | Master mix cooling temperature | | 10 ± 2 °C (at room temperature) |
| qPCR transfer | Cherry-picking, user-defined by Excel | qPCR temperature range | | PCR well block: 25-100 °C Lid: 25-110 °C |
| qPCR channels | FAM, HEX, ROX | qPCR temperature ramp rate | | Heating: 2 °C/s Cooling: 1.5 °C/s |
| Optional qPCR channels | Cy5, TAMRA, Quasar 705 | Temperature accuracy | | ±0.5 °C (after 30 seconds) |
| PCR reaction volume | 15-60 ul | Temperature uniformity | | At 50 °C: ±0.2 °C At 72 °C: ±0.3 °C At 95 °C: ±0.5 °C |
| PCR consistency | CV within 5% | Voltage | | 100-120 V 220-240 V |
| Dynamic range | 9 logs of linear range | USB port | | 2 |
| Master mix wells | 9 | Ethernet port | | 1 |
| Pipetting volume | 5-1000 ul | Export format | | Excel, csv, txt |
| Pipette channels | 6 (Sliding span 9-18 mm) | | | |

Optional accessories and functions

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------------|--|--------------|---------|
| RSM24 | 24 well master mix and function | \$20,000 | - |
| AB01 | Auto barcode rack and function | \$6,000 | |
| AS24 | Auto sampling and function | \$6,000 | |
| FI01-03 | Each additional qPCR channel (Cy5, TAMRA, or Quasar705) | \$4,000 | |
| Auto barcode | Automatic primary tube barcode scanning | \$10,000 | |
| Auto sampling | Automatic sample transfer from primary tubes | \$10,000 | |

LabTurbo AIO kits

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|-------------------|---|--------------|-----------------|
| AIOLGD300 | LabTurbo DNA AIO Kit (480) (300ul) | \$1500 | \$3.1 |
| AIOLGD500 | LabTurbo DNA AIO Kit (480) (500ul) | \$2000 | \$4.2 |
| AIOLGD1000 | LabTurbo DNA AIO Kit (480) (1000ul) | \$3200 | \$6.7 |
| AIOLGD2000 | LabTurbo DNA AIO Kit (480) (2000ul) | \$5500 | \$11.5 |
| AIOLVX300 | LabTurbo Viral DNA/RNA AIO Kit (480) (300ul) | \$1800 | \$3.8 |
| AIOLVX500 | LabTurbo Viral DNA/RNA AIO Kit (480) (500ul) | \$2400 | \$5.0 |
| AIOLVX1000 | LabTurbo Viral DNA/RNA AIO Kit (480) (1000ul) | \$4000 | \$8.3 |
| AIOLVX2000 | LabTurbo Viral DNA/RNA AIO Kit (480) (2000ul) | \$2200 | \$4.6 |
| AIOLVN300 | LabTurbo Virus AIO Kit (480) (300ul) | \$3500 | \$7.3 |
| AIOLVN500 | LabTurbo Virus AIO Kit (480) (500ul) | \$2000 | \$4.2 |
| AIOLVN1000 | LabTurbo Virus AIO Kit (480) (1000ul) | \$2600 | \$5.4 |
| AIOLTR500 | LabTurbo RNA AIO Kit (480) (500ul) | \$4200 | \$8.8 |
| AIOLTR1000 | LabTurbo RNA AIO Kit (480) (1000ul) | \$7000 | \$14.6 |
| AIOLFD480 | LabTurbo Forensic DNA AIO Kit (480) | \$2500 | \$5.2 |
| AIOLSD480 | LabTurbo Stool DNA AIO Kit (480) | \$2700 | \$5.6 |
| AIOLCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$6000 | \$12.5 |

Consumables

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|-----------------|
| A0130 | PCR 8-strip tubes (250) & Caps (White) | \$270 | 3822.00.90.90-2 |
| S0650 | LabTurbo AIO Robotic Filter Tip 1000ul (4800) | \$600 | 3822.00.90.90-2 |
| C0520 | LabTurbo Sample Cartridge 80/PKG | \$240 | 3822.00.90.90-2 |
| C0430 | 6-Strip Long Sample Tube, 80/PKG | \$120 | 3822.00.90.90-2 |

Warranty and Services

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|---------|
| L0000 | Engineer travel expense | \$1,500 | - |
| L0001 | Labor cost per day | \$300 | - |
| L0010 | 1-year extended warranty (parts only) | \$6,700 | - |
| L0011 | 1-year extended warranty (Parts and 2 engineer visit) | \$10,000 | - |



LabTurbo

DNA/RNA Extraction Systems

Fast, accurate & fully automated nucleic acid purification

Auto-barcoding
Auto-sampling
DNA/RNA
purification
PCR setup
Automated

Sample-to-target procedure:

LabTurbo's complete liquid-handling function allows complete automation of DNA/RNA testing preparation. No manual sample, reagent or IC transfer needed!

Advanced detection sensitivity:

Elevate detection sensitivity by high sample/elution ratio (3 ml/50 ul) and thorough impurity wash-away by membrane column purification technology.

User-friendly designs:

The unique designs of LabTurbo systems allow worktable setup in 10 minutes, sample-to-target procedure, auto reagent filling, auto consumable disposal, and easy maintenance.

Versatility:

LabTurbo is ideal for purification of various targets from diverse fields. It is suitable for detection of tumor gene, genetic disorders, infectious disease, pathogen and forensic applications.

LabTurbo 96



100 minutes



1-96 samples per run



Sample: 0.3-3 ml
Elution: 50-200 ul



LabTurbo 48



90 minutes



1-48 samples per run



Sample: 0.3-3 ml
Elution: 50-200 ul



LabTurbo 24



70 minutes



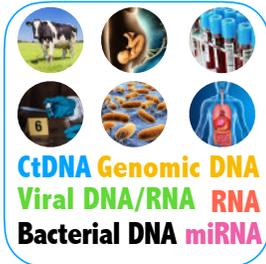
1-24 samples per run



Sample: 0.3-3 ml
Elution: 50-200 ul



Sensitivity



CtDNA Genomic DNA
Viral DNA/RNA RNA
Bacterial DNA miRNA

Function:

1. Sample-to-target DNA/RNA purification with full liquid-handling capability (Auto-barcoding, auto-sampling from primary tubes+Internal control transfer+DNA/RNA purification)
2. Basic PCR setup (up to 2 master mixes with DNA/RNA eluate) for 96-well plate and PCR strip tubes
3. UV light sterilization, 10% bleach applicable

LabTurbo

Methylated DNA Purification Systems

Sample-to-target biomarker purification with bisulfite conversion procedure. Electrify your **cancer** and **epigenetic** research assays!

**DNA/RNA
purification**

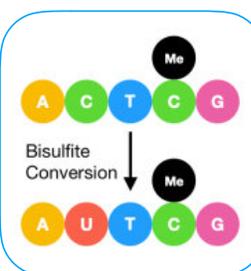
+

**Bisulfite
conversion**

Automated

Sample-to-target procedure:

LabTurbo automates the whole methylated cancer biomarker purification and conversion procedure. Greatly reduce the time and effort for cancer and epigenetic research.



Auto bisulfite conversion:

Complete automation of the complicated bisulfite conversion procedure such as deamination and desulphonation. The DNA is ready for PCR and biomarker detection.



Leverage lab efficiency:

Sample-to-target procedure greatly improves the productivity and lab efficiency while eliminating handling errors and variances. Reduce a full day work to less than 6 hours!



Cost-effective:

The streamlined operation reduces turnaround time, saves labor and ensures consistent purification quality. Elevate cost-effectiveness for cancer and epigenetic research.



LabTurbo 24



3 hours / 1-6 samples
5 hours / 7-12 samples



1-12 samples per run



Sample: 2 ml
Elution: 60 ul



LabTurbo 48



4 hours / 1-12 samples
6 hours / 13-24 samples



1-24 samples per run



Sample: 2 ml
Elution: 60 ul

Function:

1. Sample-to-target methylated DNA purification and bisulfite conversion (DNA/RNA purification+Bisulfite conversion)
2. Basic PCR setup (up to 2 master mixes with DNA/RNA eluate) for 96-well plate and PCR strip tubes
3. Compatible with commercial DNA methylation kits
4. UV light sterilization, 10% bleach applicable



Specification

Standard model

| Model | C2410 C2420 | C2410AB C2420AB | C4810 C4820 | C4810AB C4820AB | 96X10 96X20 | 96X10AB 96X20AB |
|------------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| Retail price | \$50,000 | \$60,000 | \$60,000 | \$70,000 | \$90,000 | \$100,000 |
| Sample number | 1-24 | 1-24 | 1-48 | 1-48 | 1-96 | 1-96 |
| Max volume | 0.3-1 ml | 0.3-1 ml | 0.3-1 ml | 0.3-1 ml | 0.3-1 ml | 0.3-1 ml |
| Style | Bench-top | Bench-top | Floor-standing | Floor-standing | Floor-standing | Floor-standing |
| Size (cm) | 66 x 53 x 82 | 75 x 65 x 87 | 66 x 64 x 160 | 75 x 76 x 160 | 155 x 65 x 180 | 165 x 77 x 180 |
| Weight (kg) | 80 | 100 | 180 | 200 | 360 | 380 |
| Pipette Channel | 6 | 6 | 6 | 6 | 12 | 12 |

Xtreme Capacity model

| Model | C24X10 C24X20 | C24X10AB C24X20AB | C4510 C4520 | C4510AB C4520AB |
|------------------------|------------------|----------------------|----------------|--------------------|
| Retail price | \$50,000 | \$60,000 | \$60,000 | \$70,000 |
| Sample number | 1-24 | 1-24 | 1-45 | 1-45 |
| Max volume | 0.3-2.5 ml | 0.3-2.5 ml | 0.3-2 ml | 0.3-2 ml |
| Style | Bench-top | Bench-top | Floor-standing | Floor-standing |
| Size (cm) | 66 x 53 x 82 | 75 x 65 x 87 | 66 x 64 x 160 | 75 x 76 x 160 |
| Weight (kg) | 80 | 100 | 180 | 200 |
| Pipette Channel | 6 | 6 | 6 | 6 |

Xtreme Capacity Tip Reuse model

| Model | C24XC10 C24XC20 | C24XC10AB C24XC20AB | C48XC10 C48XC20 | C48XC10AB C48XC20AB | C96XC10 C96XC20 | C96XC10AB C96XC20AB |
|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|
| Retail price | \$50,000 | \$60,000 | \$60,000 | \$70,000 | \$90,000 | \$100,000 |
| Sample number | 1-24 | 1-24 | 1-48 | 1-48 | 1-96 | 1-96 |
| Max volume | 0.3-3 ml | 0.3-3 ml | 0.3-3 ml | 0.3-3 ml | 0.3-3 ml | 0.3-3 ml |
| Style | Bench-top | Bench-top | Floor-standing | Floor-standing | Floor-standing | Floor-standing |
| Size (cm) | 75 x 65 x 87 | 75 x 65 x 87 | 75 x 76 x 160 | 75 x 76 x 160 | 165 x 77 x 180 | 165 x 77 x 180 |
| Weight (kg) | 100 | 100 | 200 | 200 | 380 | 380 |
| Pipette Channel | 6 | 6 | 6 | 6 | 12 | 12 |

| | | | |
|----------------------------------|---|----------------------|------------------------|
| Master mix & IC wells | 2 (for all 24 and 48 models) 3 (For all 96 models) | Voltage | 100-120 V 220-240 V |
| Pipetting volume | 5-1000 ul | Ethernet port | 1 |
| USB port | 2 | Export format | Excel, csv, txt |

LabTurbo 24 kits (Standard model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|------------------------|---|--------------|-----------------|
| 24C-LGD480-300 | LabTurbo DNA Mini Kit (480) (300ul) | \$1512 | \$3.2 |
| 24C-LGD480-400 | LabTurbo DNA Mini Kit (480) (400ul) | \$1764 | \$3.7 |
| 24C-LGD480-500 | LabTurbo DNA Mini Kit (480) (500ul) | \$2016 | \$4.2 |
| 24C-LGD480-600 | LabTurbo DNA Mini Kit (480) (600ul) | \$2268 | \$4.7 |
| 24C-LGD480-700 | LabTurbo DNA Mini Kit (480) (700ul) | \$2520 | \$5.3 |
| 24C-LGD480-800 | LabTurbo DNA Mini Kit (480) (800ul) | \$2772 | \$5.8 |
| 24C-LGD480-900 | LabTurbo DNA Mini Kit (480) (900ul) | \$3024 | \$6.3 |
| 24C-LGD480-1000 | LabTurbo DNA Mini Kit (480) (1000ul) | \$3276 | \$6.8 |
| 24C-LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5570 | \$11.6 |
| 24C-LVX480-300 | LabTurbo Viral DNA/RNA Mini Kit (480) (300ul) | \$1919 | \$4.0 |
| 24C-LVX480-500 | LabTurbo Viral DNA/RNA Mini Kit (480) (500ul) | \$2580 | \$5.4 |
| 24C-LVX480-1000 | LabTurbo Viral DNA/RNA Mini Kit (480) (1000ul) | \$4234 | \$8.8 |
| 24C-LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7542 | \$15.7 |
| 24C-LVN480-300 | LabTurbo Virus Mini Kit (480) (300ul) | \$1827 | \$3.8 |
| 24C-LVN480-400 | LabTurbo Virus Mini Kit (480) (400ul) | \$2142 | \$4.5 |
| 24C-LVN480-500 | LabTurbo Virus Mini Kit (480) (500ul) | \$2457 | \$5.1 |
| 24C-LVN480-600 | LabTurbo Virus Mini Kit (480) (600ul) | \$2772 | \$5.8 |
| 24C-LVN480-700 | LabTurbo Virus Mini Kit (480) (700ul) | \$3087 | \$6.4 |
| 24C-LVN480-800 | LabTurbo Virus Mini Kit (480) (800ul) | \$3402 | \$7.1 |
| 24C-LVN480-900 | LabTurbo Virus Mini Kit (480) (900ul) | \$3717 | \$7.7 |
| 24C-LVN480-1000 | LabTurbo Virus Mini Kit (480) (1000ul) | \$4032 | \$8.4 |
| 24C-LTR480-500 | LabTurbo RNA Mini Kit (480) (500ul) | \$2268 | \$4.7 |
| 24C-LTR480-1000 | LabTurbo RNA Mini Kit (480) (1000ul) | \$3402 | \$7.1 |
| 24C-LFD480 | LabTurbo Forensic DNA Mini Kit (480) | \$2457 | \$5.1 |
| 24C-LSD 480 | LabTurbo Stool DNA Mini Kit (480) | \$3087 | \$6.4 |
| 24C-LCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$6000 | \$25.0 |

LabTurbo 48 kits (Standard model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|--------------------|---|--------------|-----------------|
| LGD480-300 | LabTurbo DNA Mini Kit (480) (300ul) | \$1440 | \$3.0 |
| LGD480-400 | LabTurbo DNA Mini Kit (480) (400ul) | \$1680 | \$3.5 |
| LGD480-500 | LabTurbo DNA Mini Kit (480) (500ul) | \$1920 | \$4.0 |
| LGD480-600 | LabTurbo DNA Mini Kit (480) (600ul) | \$2160 | \$4.5 |
| LGD480-700 | LabTurbo DNA Mini Kit (480) (700ul) | \$2400 | \$5.0 |
| LGD480-800 | LabTurbo DNA Mini Kit (480) (800ul) | \$2640 | \$5.5 |
| LGD480-900 | LabTurbo DNA Mini Kit (480) (900ul) | \$2880 | \$6.0 |
| LGD480-1000 | LabTurbo DNA Mini Kit (480) (1000ul) | \$3120 | \$6.5 |
| LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5304 | \$11.1 |
| LVX480-300 | LabTurbo Viral DNA/RNA Mini Kit (480) (300ul) | \$1827 | \$3.8 |
| LVX480-500 | LabTurbo Viral DNA/RNA Mini Kit (480) (500ul) | \$2457 | \$5.1 |
| LVX480-1000 | LabTurbo Viral DNA/RNA Mini Kit (480) (1000ul) | \$4032 | \$8.4 |
| LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7182 | \$15.0 |
| LVN480-300 | LabTurbo Virus Mini Kit (480) (300ul) | \$1827 | \$3.8 |
| LVN480-400 | LabTurbo Virus Mini Kit (480) (400ul) | \$2142 | \$4.5 |
| LVN480-500 | LabTurbo Virus Mini Kit (480) (500ul) | \$2457 | \$5.1 |
| LVN480-600 | LabTurbo Virus Mini Kit (480) (600ul) | \$2772 | \$5.8 |
| LVN480-700 | LabTurbo Virus Mini Kit (480) (700ul) | \$3087 | \$6.4 |
| LVN480-800 | LabTurbo Virus Mini Kit (480) (800ul) | \$3402 | \$7.1 |
| LVN480-900 | LabTurbo Virus Mini Kit (480) (900ul) | \$3717 | \$7.7 |
| LVN480-1000 | LabTurbo Virus Mini Kit (480) (1000ul) | \$4032 | \$8.4 |
| LTR480-500 | LabTurbo RNA Mini Kit (480) (500ul) | \$2268 | \$4.7 |
| LTR480-1000 | LabTurbo RNA Mini Kit (480) (1000ul) | \$3402 | \$7.1 |
| LFD480 | LabTurbo Forensic DNA Mini Kit (480) | \$2457 | \$5.1 |
| LSD 480 | LabTurbo Stool DNA Mini Kit (480) | \$3087 | \$6.4 |
| LCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$4800 | \$20.0 |

LabTurbo 96 kits (Standard model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|-----------------|--|--------------|-----------------|
| XLGD300 | LabTurbo DNA X Kit (960) (300ul) | \$3312 | \$3.5 |
| XLGD400 | LabTurbo DNA X Kit (960) (400ul) | \$3864 | \$4.0 |
| XLGD500 | LabTurbo DNA X Kit (960) (500ul) | \$4416 | \$4.6 |
| XLGD600 | LabTurbo DNA X Kit (960) (600ul) | \$4968 | \$5.2 |
| XLGD700 | LabTurbo DNA X Kit (960) (700ul) | \$5520 | \$5.8 |
| XLGD800 | LabTurbo DNA X Kit (960) (800ul) | \$6072 | \$6.3 |
| XLGD900 | LabTurbo DNA X Kit (960) (900ul) | \$6624 | \$6.9 |
| XLGD1000 | LabTurbo DNA X Kit (960) (1000ul) | \$7176 | \$7.5 |
| XLGD2000 | LabTurbo DNA X Kit (960) (2000ul) | \$12199 | \$12.7 |
| XLVX300 | LabTurbo Viral DNA/RNA X Kit (960) (300ul) | \$4202 | \$4.4 |
| XLVX500 | LabTurbo Viral DNA/RNA X Kit (960) (500ul) | \$5651 | \$5.9 |
| XLVX1000 | LabTurbo Viral DNA/RNA X Kit (960) (1000ul) | \$9274 | \$9.7 |
| XLVX2000 | LabTurbo Viral DNA/RNA X Kit (960) (2000ul) | \$16519 | \$17.2 |
| XLVN300 | LabTurbo Virus X Kit (960) (300ul) | \$4002 | \$4.2 |
| XLVN400 | LabTurbo Virus X Kit (960) (400ul) | \$4692 | \$4.9 |
| XLVN500 | LabTurbo Virus X Kit (960) (500ul) | \$5382 | \$5.6 |
| XLVN600 | LabTurbo Virus X Kit (960) (600ul) | \$6072 | \$6.3 |
| XLVN700 | LabTurbo Virus X Kit (960) (700ul) | \$6762 | \$7.0 |
| XLVN800 | LabTurbo Virus X Kit (960) (800ul) | \$7452 | \$7.8 |
| XLVN900 | LabTurbo Virus X Kit (960) (900ul) | \$8142 | \$8.5 |
| XLVN1000 | LabTurbo Virus X Kit (960) (1000ul) | \$8832 | \$9.2 |
| XLTR500 | LabTurbo RNA X Kit (960) (500ul) | \$4968 | \$5.2 |
| XLT10500 | LabTurbo RNA X Kit (960) (1000ul) | \$7452 | \$7.8 |
| XLFD | LabTurbo Forensic DNA X Kit (960) | \$5382 | \$5.6 |
| XLSD | LabTurbo Stool DNA X Kit (960) | \$6762 | \$7.0 |
| XLCD | LabTurbo Circulating DNA X Kit (240)(1600ul) | \$9600 | \$20.0 |

LabTurbo 24 kits (Xtreme Capacity model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|-----------------|---|--------------|-----------------|
| 24X-LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5570 | \$11.6 |
| 24X-LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7542 | \$15.7 |
| 24X-LCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$4800 | \$20.0 |

LabTurbo 45 kits (Xtreme Capacity model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|-----------------|---|--------------|-----------------|
| 45X-LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5304 | \$11.1 |
| 45X-LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7182 | \$15.0 |
| 45X-LCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$4800 | \$20.0 |

LabTurbo 24 kits (Xtreme Capacity Tip Reuse model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|------------------|---|--------------|-----------------|
| 24XC-LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5570 | \$11.6 |
| 24XC-LGD480-3000 | LabTurbo DNA Mini Kit (480) (3000ul) | \$9017 | \$18.8 |
| 24XC-LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7542 | \$15.7 |
| 24XC-LVX480-3000 | LabTurbo Viral DNA/RNA Mini Kit (480) (3000ul) | \$12793 | \$26.7 |
| 24XC-LCD1600 | LabTurbo Circulating DNA Mini Kit (240)(1600ul) | \$4800 | \$20.0 |

LabTurbo 48 kits (Xtreme Capacity Tip Reuse model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|------------------|---|--------------|-----------------|
| 48XC-LGD480-2000 | LabTurbo DNA Mini Kit (480) (2000ul) | \$5570 | \$11.6 |
| 48XC-LGD480-3000 | LabTurbo DNA Mini Kit (480) (3000ul) | \$9017 | \$18.8 |
| 48-LVX480-2000 | LabTurbo Viral DNA/RNA Mini Kit (480) (2000ul) | \$7542 | \$15.7 |
| 48-LVX480-3000 | LabTurbo Viral DNA/RNA Mini Kit (480) (3000ul) | \$12793 | \$26.7 |
| 48-LCD1600 | LabTurbo Circulating DNA Mini Kit (480)(1600ul) | \$4800 | \$20.0 |

LabTurbo 96 kits (Xtreme Capacity Tip Reuse model)

| Catalog Number | Product Name (prep number)(sample volume) | Retail Price | Cost per sample |
|----------------|---|--------------|-----------------|
| XCLGD2000 | LabTurbo DNA Mini Kit (960) (2000ul) | \$11140 | \$11.6 |
| XCLGD3000 | LabTurbo DNA Mini Kit (960) (3000ul) | \$18034 | \$18.8 |
| XCLVX2000 | LabTurbo Viral DNA/RNA Mini Kit (960) (2000ul) | \$15084 | \$15.7 |
| XCLVX3000 | LabTurbo Viral DNA/RNA Mini Kit (960) (3000ul) | \$25586 | \$26.7 |
| XCLCD1600 | LabTurbo Circulating DNA Mini Kit (960)(1600ul) | \$9600 | \$20.0 |

Consumables

| Catalog Number | Product Name | Retail Price | HS Code |
|------------------|--|--------------|-----------------|
| CEB500 | Column Clean-Elution Buffer | \$80 | 3822.00.90.90-2 |
| C0701 | DLL Buffer (200 ml) | \$343 | 3822.00.90.90-2 |
| C0702 | VLL Buffer (200 ml) | \$514 | 3822.00.90.90-2 |
| C0703 | RLL Buffer (400 ml) | \$600 | 3822.00.90.90-2 |
| C0704 | Proteinase K (5.0 ml) | \$200 | 3822.00.90.90-2 |
| C0705 | BE solution (2.0 ml) | \$160 | 3822.00.90.90-2 |
| C0706 | VXL Buffer (200 ml) | \$540 | 3822.00.90.90-2 |
| C0707 | LCL Buffer (200 ml) | \$741 | 3822.00.90.90-2 |
| C0708 | LCB Buffer (270 ml) | \$520 | 3822.00.90.90-2 |
| C0709 | TEL Buffer (250 ml) | \$57 | 3822.00.90.90-2 |
| S0705 | LW1 Buffer (175ml) | \$120 | 3822.00.90.90-2 |
| S0707 | LTL Buffer (200ml) | \$120 | 3822.00.90.90-2 |
| S0713 | TPP Buffer (80ml) | \$120 | 3822.00.90.90-2 |
| LPTR-B100 | LPTR Human Whole Blood expanding package (100) DNAgone columns x 100, collection tubes x 100, 10X Buffer TEL (100mL) | \$150 | 3822.00.90.90-2 |
| S0220 | Elution Tube (1.5ml), 500/PKG | \$36 | 3926.90.90.90-8 |
| S0230 | Elution Tube (2.5ml), 250/PKG | \$46 | 3926.90.90.90-8 |
| C0220 | 6-Strip Elution Tube w Cap (2.5ml), 80/PKG | \$87 | 3926.90.90.90-8 |
| C0420 | 6-Strip Sample Tube (2.5ml), 80/PKG | \$57 | 3926.90.90.90-8 |
| FC100 | Short filter Columns, 100/PKG | \$84 | 3926.90.90.90-8 |
| FC120 | Long filter Columns, 100/PKG | \$126 | 3926.90.90.90-8 |
| C0430 | 6-Strip Long Sample Tube, 80/PKG | \$170 | 3926.90.90.90-8 |
| C0510 | 6-Strip SC adapter for short column, 80/PKG | \$170 | 3926.90.90.90-8 |
| C0530 | 6-Strip SC adapter for long column, 80/PKG | \$185 | 3926.90.90.90-8 |
| C0520 | LabTurbo Sample Cartridge (80) for LabTurbo XC models | \$320 | 3926.90.90.90-8 |
| S0550 | LabTurbo Robotic Filter Tip (1100 µl) | \$600 | 3926.90.90.90-8 |
| S0650 | LabTurbo AIO Robotic Filter Tip 1000ul (4800) | \$600 | 3822.00.90.90-2 |
| S0950 | LabTurbo Robotic Filter Tip (300 µl) | \$600 | 3926.90.90.90-8 |
| S0520 | LabTurbo D tube, 480/PKG (Stainless beads included) | \$279 | 3926.90.90.90-8 |

Accessories

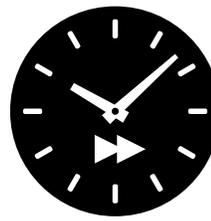
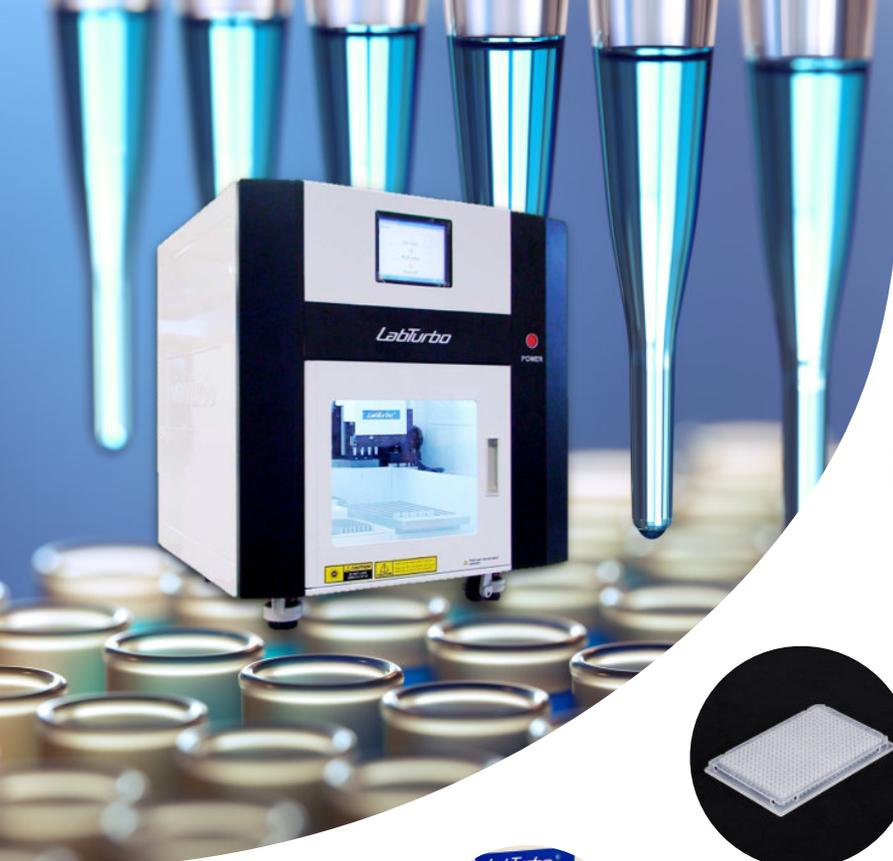
| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|--|--------------|---------|
| L1001 | Barcode Scanner (1D) | \$221 | - |
| L1001A | Barcode Scanner (2D) | \$442 | - |
| L1002 | PCR tube/ plate Adapter | \$221 | |
| L1005 | LabTurbo 2 ml screw tube rack (24) for LabTurbo 24 series | \$671 | |
| L1006 | LabTurbo Primary tube rack set (24) for LabTurbo 24 series | \$921 | |
| L1007 | LabTurbo 2 ml screw tube rack (48) for LabTurbo 48 series | \$814 | |
| L1008 | LabTurbo Primary tube rack set (48) for LabTurbo 48 series | \$1,414 | |
| L1015 | LabTurbo 2 ml screw tube rack (96) for LabTurbo 96 series | \$1,200 | |
| L1016 | LabTurbo Primary tube rack set (96) for LabTurbo 96 series | \$2,900 | |
| L1009 | LabTurbo Primary tube rack adapters set (25 pcs) | \$421 | |
| L1014 | LabTurbo Buffer rack for LTL and LCL buffers | \$671 | |
| L1010 | Uninterruptible Power Supply (UPS) (110V) | \$1,050 | |
| L1011 | Uninterruptible Power Supply (UPS) (220V) | \$1,050 | |
| L1012 | LabTurbo vacuum pressure sensor | \$100 | |
| L1013 | LabTurbo vacuum system filter | 50 | |
| S0796 | LabTurbo Experiment Bench (for LabTurbo 24 series) | 2571 | - |

Warranty

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|---------|
| L0004 | 1-year extended warranty (parts only for LT24 series | \$1,600 | - |
| L0005 | 1-year extended warranty (Parts and 2 engineer visit) for LT24 series | \$5,200 | - |
| L0001 | 1-year extended warranty (parts only for LT48 and 45 series | \$2,000 | |
| L0002 | 1-year extended warranty (Parts and 2 engineer visit) for and 45 series | \$5,600 | |
| L0008 | 1-year extended warranty (parts only for LT96 series | \$3,600 | |
| L0009 | 1-year extended warranty (Parts and 2 engineer visit) for LT96 series | \$7,200 | |

Services

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|-------------------------|--------------|---------|
| L0000 | Engineer travel expense | \$1,500 | - |
| L0001 | Labor cost per day | \$300 | - |



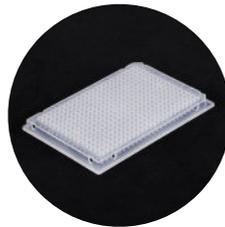
Faster PCR Setup:

384-well plate PCR setup in 35 minutes



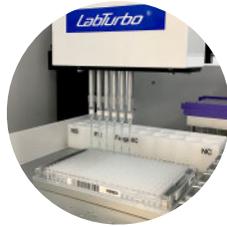
“Cherry-picking” transfer:

User-defined transfers mixing any samples with any master mixes. Simple transfer map editing by Excel.



Practical solution for 384-well plate:

Fast and fully automated liquid-handling enable the use of 384-well plate practical for high throughput process and applications



Consistent and reliable:

Fully automated PCR setup to avoid handling variance, fatigue, and cross-contamination



Laboratory Information System Connectivity:

Full LIMS and instrument connectivity via Excel, csv and txt.

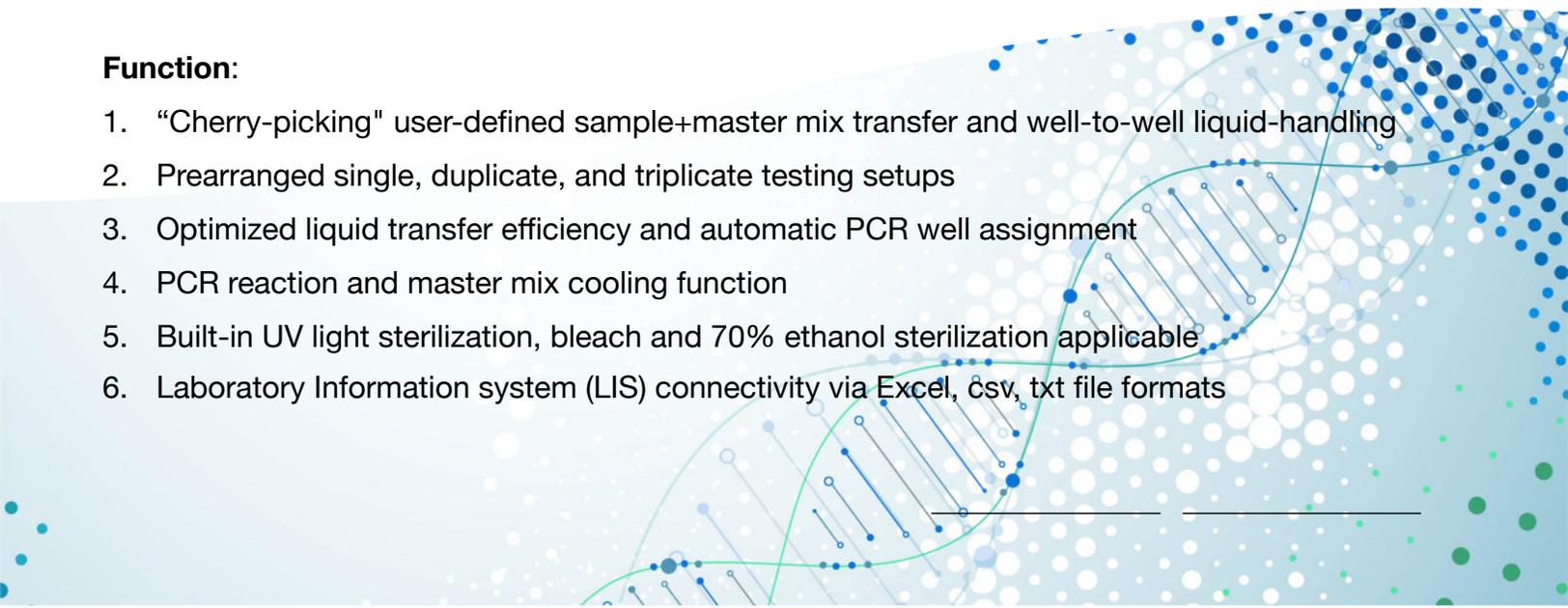


384 Liquid-handling System

Fast & Precise PCR setup for 384-well plate

Function:

1. “Cherry-picking” user-defined sample+master mix transfer and well-to-well liquid-handling
2. Prearranged single, duplicate, and triplicate testing setups
3. Optimized liquid transfer efficiency and automatic PCR well assignment
4. PCR reaction and master mix cooling function
5. Built-in UV light sterilization, bleach and 70% ethanol sterilization applicable
6. Laboratory Information system (LIS) connectivity via Excel, csv, txt file formats



Specification

| | | | |
|------------------------|--|----------------------------|------------------------------------|
| Format | 384 well plate | Master mix wells | 20 |
| Throughput | 384 well transfer in 35 minutes | Sample wells | 2 x 48 |
| Size (cm) | 66 x 53 x 70 | Pipette channels | 6 (Sliding span 9-18 mm) |
| Weight (kg) | 60 | Tip rack | 2 x 96 |
| Style | Bench-top | Cooling temperature | 10 ± 2 °C (at room temperature) |
| Transfer type | Cherry-picking, user-defined by Excel | Voltage | 100-240 V |
| Transfer volume | 2-50 ul | USB port | 3 |
| PCR consistency | CV within 5% | VGA port | 1 |

System and Accessories

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|-----------------|
| P384 | LabTurbo 384 Liquid-handling System (100-240 V) | \$65,000 | 9027.80.90.90-6 |
| L1001 | Barcode Scanner (1D) | \$221 | - |
| L1001A | Barcode Scanner (2D) | \$442 | - |
| L1002 | 384 PCR Plate Adapter | \$214 | - |
| L1010 | Uninterruptible Power Supply (UPS) (110V) | \$1,050 | - |
| L1011 | Uninterruptible Power Supply (UPS) (220V) | \$1,050 | - |

Consumables

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|-----------------|
| S1050 | LabTurbo Robotic Filter Tip (50 µl) (4800 tips) | \$600 | 3926.90.90.90-8 |

Warranty and Services

| Catalog Number | Product Name | Retail Price | HS Code |
|----------------|---|--------------|---------|
| L0000 | Engineer travel expense | \$1,500 | - |
| L0001 | Labor cost per day | \$300 | - |
| L0016 | 1-year extended warranty (parts only) | \$1,000 | - |
| L0017 | 1-year extended warranty (Parts and 2 engineer visit) | \$4,600 | - |

Ordering information

| | |
|---------------------------|-------------------------------|
| US Distributor: | Ph: 828-575-9250 |
| BioVendor, LLC | Toll-Free: 1800-404-7807 |
| 128 Bingham Rd., Ste 1300 | E-mail: infoUSA@BioVendor.com |
| Asheville, NC 28806 | Web: www.BioVendor.com |

LabTurbo Kits

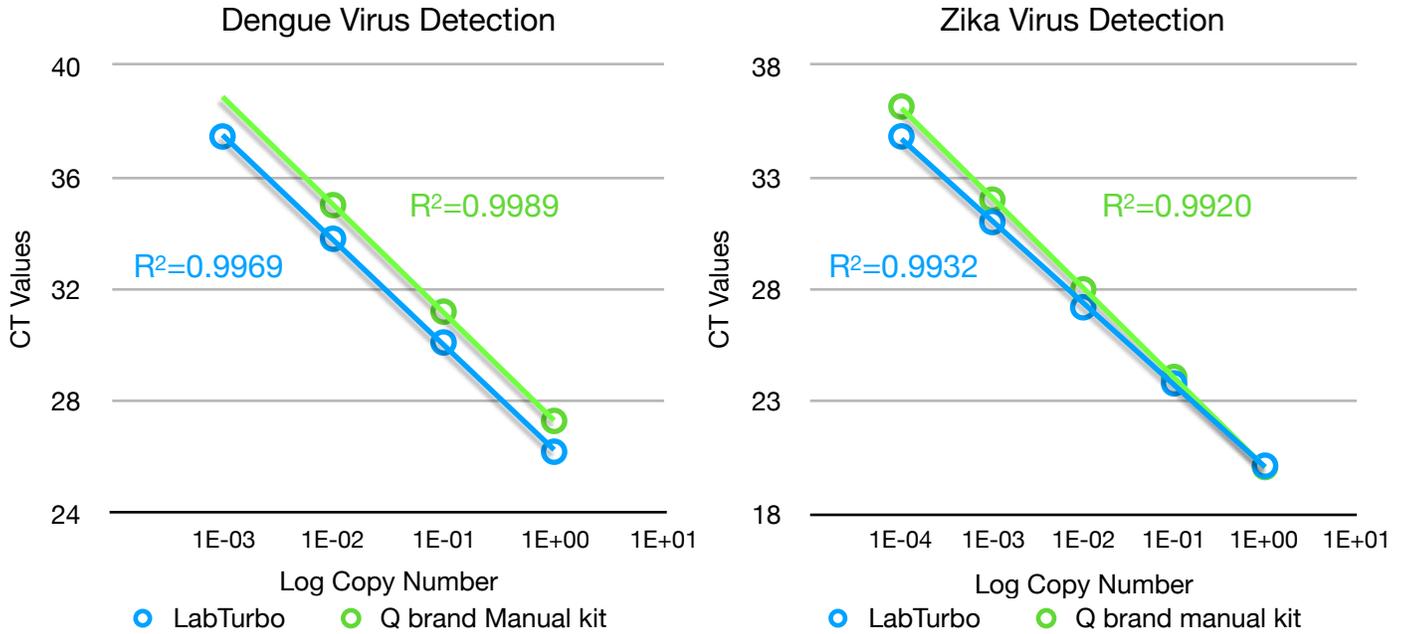
Kit contains LabTurbo sample tubes, elution tubes, column sets, reagents, and proteinase K. Filtered tips can be purchased separately. Ethanol is to be provided by users.



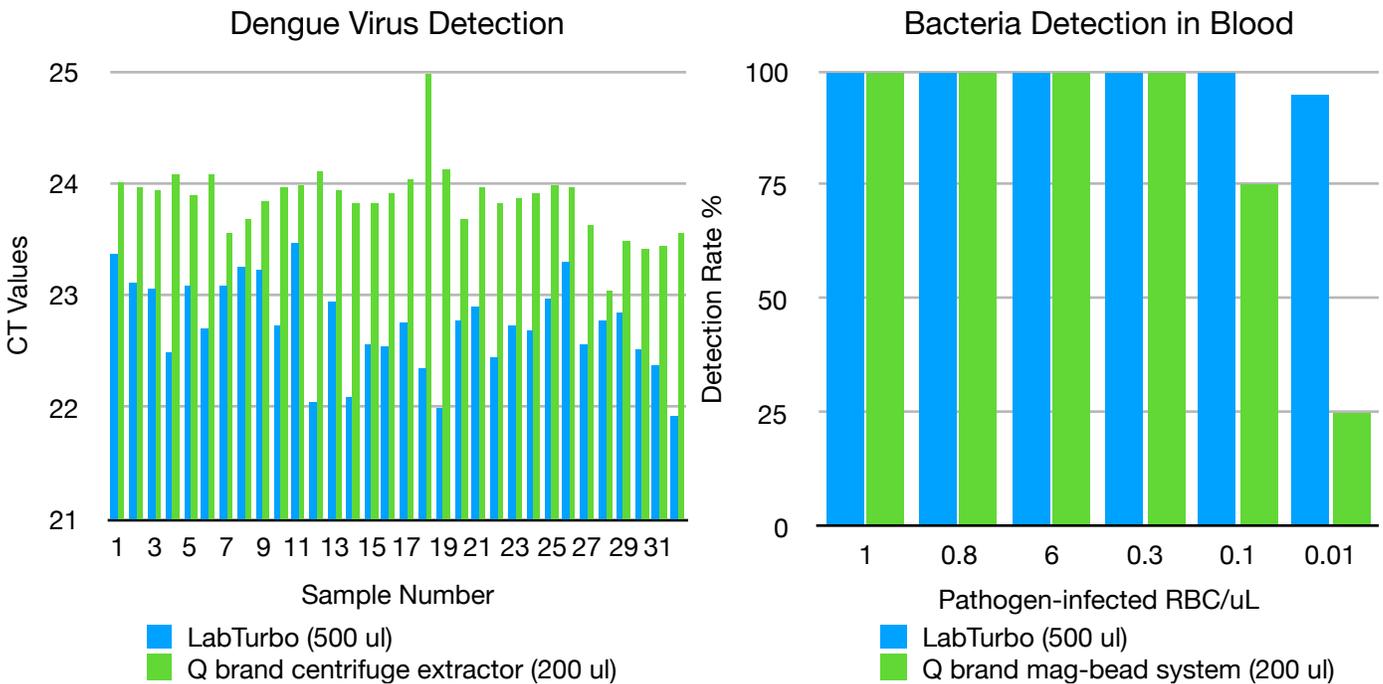
| Kits | LGD | LVN | LVX | LTR | LCD | LFD |
|--------------|--|--|--|--|---|---|
| Name | DNA mini kit | Virus mini kit | Virus combo kit | RNA mini kit | Circulating DNA | Forensic DNA |
| Target | Genomic DNA | Viral DNA | Viral DNA+RNA | Total RNA | Circulating DNA | Genomic DNA |
| Input volume | 220-3000 μ L | 220-1000 μ L | 300-3000 μ L | 500, 1000 μ L | 1, 2, 3 ml | Custom size |
| Sample types | Blood Buffy coat Saliva Biological fluids Cells Bacteria Milk Animal tissues Plant tissues | Serum/Plasma Cell-free fluid Stool Swab medium FFPE tissue | Stool Urine Soil Serum/Plasma FFPE tissues Animal tissues Plant tissues | Organ tissues Plant leaves Blood cells Cell-free fluid | Plasma Serum | Buccal Swabs Cigarette butts Straw Chewing gum Tape Tissue paper DBS cards FTA cards |
| Application | Pathogen/ Bacteria detection, Bacteremia screening, HLA-typing, NGS, Molecular diagnostics, Phylogenomics, Aquatic animal screening | HIV HBV HCV Norovirus HPV (vaginal swab) Influenza EBV BKV CMV Non-invasive prenatal diagnosis | Virus/bacteria detection from stool or urine, Norovirus/ Rotavirus screening, Soil DNA/RNA extraction, Simultaneous DNA+RNA extraction | Pathogen detection, Molecular mechanism identification, Cell expression | Non-invasive prenatal diagnosis, Circulating DNA extraction, Cancer detection, Organ transplant monitoring | Forensic identification, Paternity identification, Precision Medicine (Fully automated procedure from sample to DNA. No pretreatment or manual steps needed) |

Performance

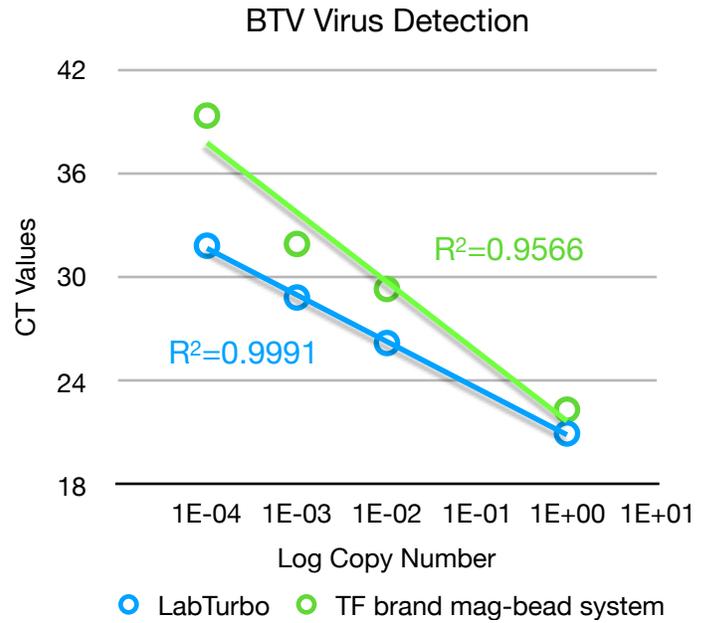
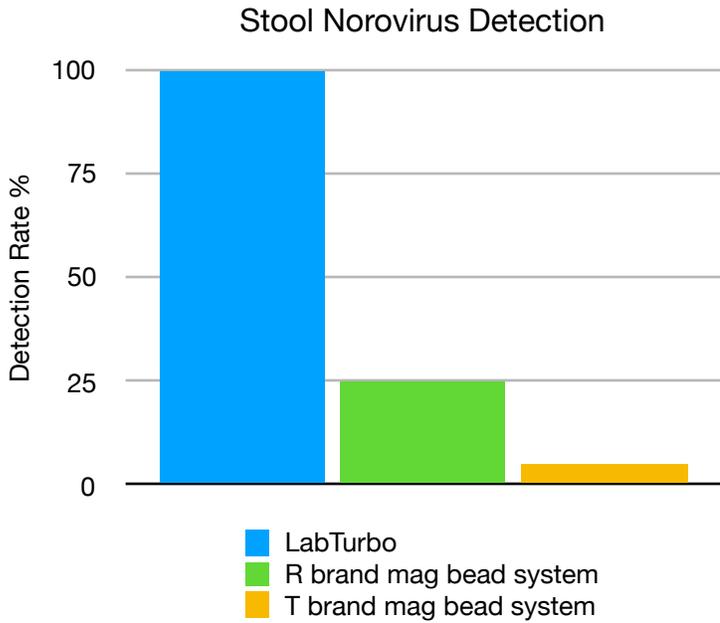
Enhanced sensitivity by LabTurbo automation: avoid false negative at low target concentration



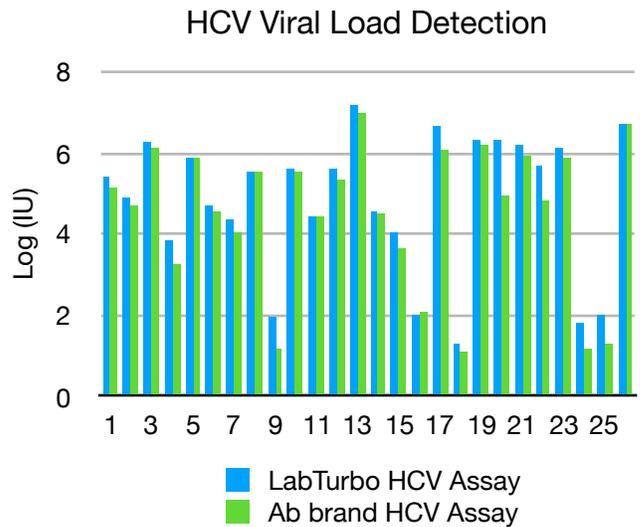
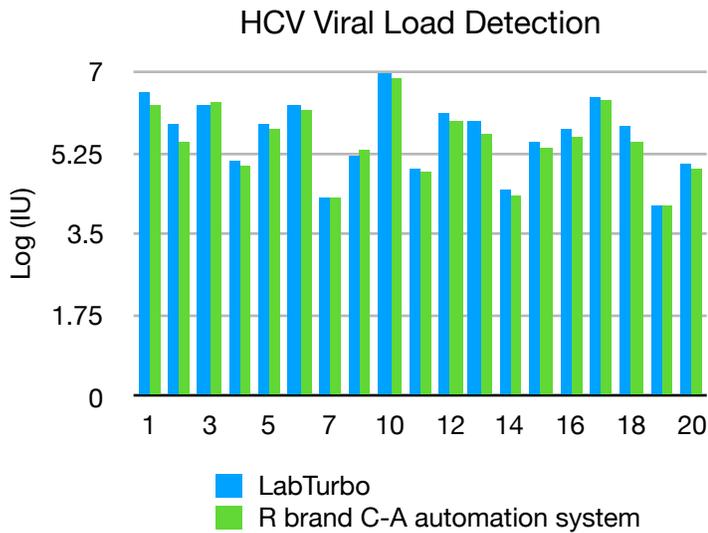
Enhanced sensitivity by elevated sample/elution volume ratio to enhance target recovery and detection rate at low target concentration



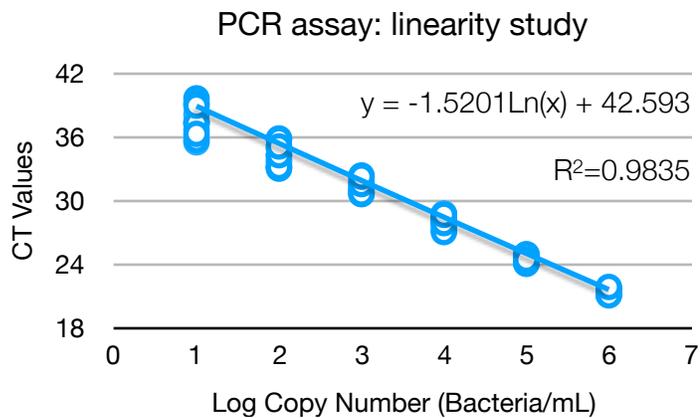
Enhanced sensitivity by elevated sample/elution volume ratio and membrane column technology



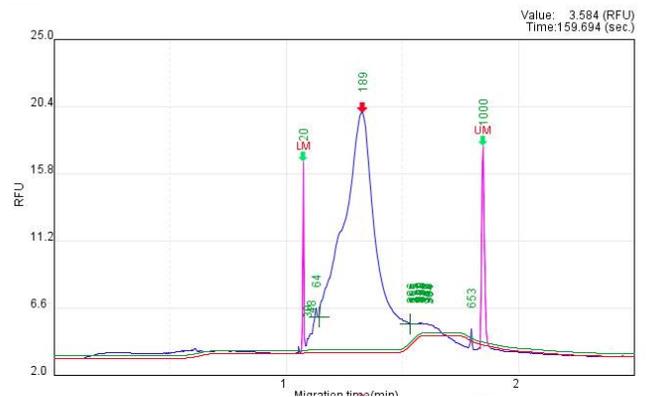
Comparable detection results compared to well-known brands



Excellent detection consistence and linearity



Excellent CtDNA Recovery





Automation for your application

Distributed By:

BioVendor

Research
and Diagnostic Products



U.S. Distributor:

BioVendor, LLC
128 Bingham Rd., Ste 1300
Asheville, NC 28806
Ph: 828-575-9250
Toll-Free: 1800-404-7807
E-mail: infoUSA@BioVendor.com
Web: www.BioVendor.com

LabTurbo Biotech Corporation

Taiwan Headquarter

Website: www.labturbo.com
Address: 3F, No.150, Sec 4, ChengDe
Road, Taipei, Taiwan