

LabTurbo

Handbook

480 mini kit

2012/02 First Edition



TAIGEN BIOSCIENCE CORPORATION

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Kit Contents

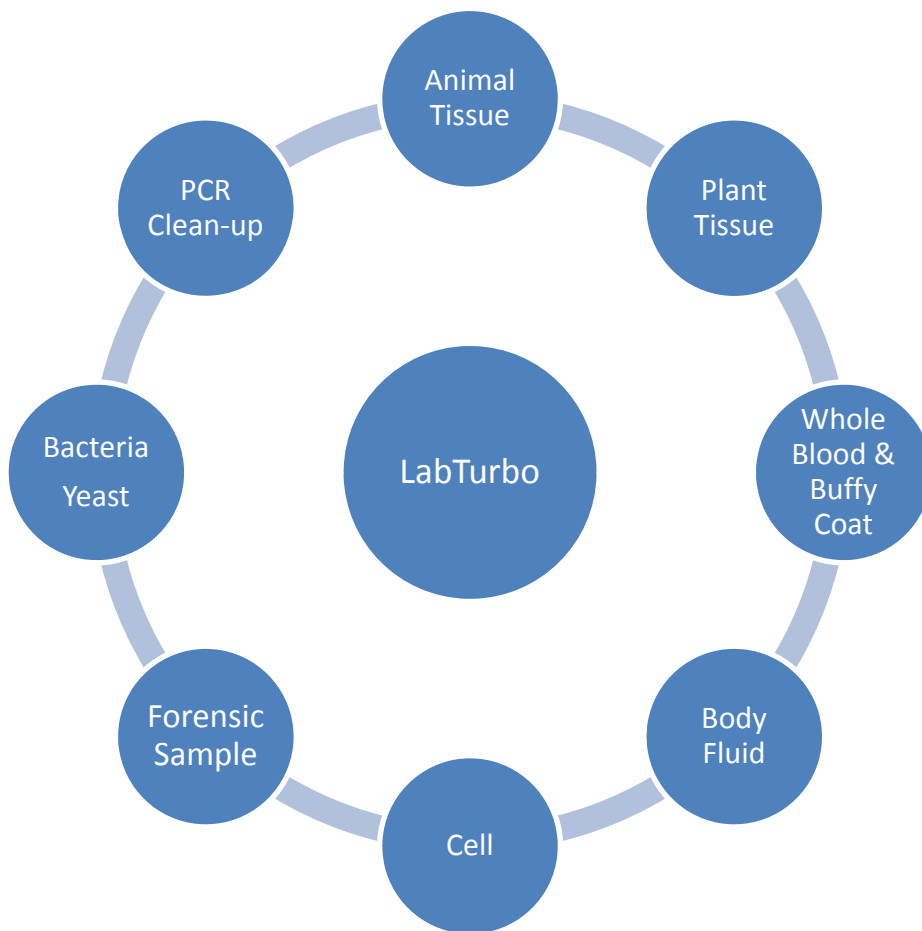
LabTurbo Kit	DNA Mini Kit	DNA Mini Kit	DNA Mini Kit	DNA Mini Kit
Cat. No.	LGD480-220	LGD480-300	LGD480-500	LGD480-1000
Number of preparations	480	480	480	480
Membrane column	480	480	480	480
6-strip SC adaptor	80	80	80	80
6-strip Sample tube	100	100	100	100
Elution tubes	480	480	480	480
DLL	160 ml	1 x 200 ml	2 x 160 ml	1 x 160 ml 2 x 200 ml
LW1 (concentrate)	4 x 175 ml	4 x 175 ml	4 x 175 ml	4 x 175 ml
CCEB	2 x 500 ml	2 x 500 ml	2 x 500 ml	2 x 500 ml
Proteinase K	2 x 5 ml	3 x 5 ml	5 x 5 ml	9 x 6 ml
Handbook	1	1	1	1

LabTurbo Kit	Virus Mini Kit	Virus Mini Kit	Virus Mini Kit	Virus Mini Kit
Cat. No.	LVN480-220	LVN480-300	LVN480-500	LVN480-1000
Number of preparations	480	480	480	480
Membrane column	480	480	480	480
6-strip SC adaptor	80	80	80	80
6-strip Sample tube	100	100	100	100
Elution tubes	480	480	480	480
VLL	160 ml	1 x 200 ml	2 x 160 ml	1 x 160 ml 2 x 200 ml
LW1 (concentrate)	4 x 175 ml	4 x 175 ml	4 x 175 ml	4 x 175 ml
dCCEB	2 x 500 ml	2 x 500 ml	2 x 500 ml	2 x 500 ml
Proteinase K	2 x 5 ml	3 x 5 ml	5 x 5 ml	9 x 6 ml
BE solution	1.6 ml	2.0 ml	2 x 1.6 ml	1 x 1.6 ml 2 x 2.0 ml
Handbook	1	1	1	1

LabTurbo Kit	RNA Mini Kit	Virus RNA Mini Kit	Forensic DNA Mini Kit
Cat. No.	LTR 480	LVR 480-220	LFD 480
Number of preparations	480	480	480
Membrane column	480	480	480
6-strip SC adaptor	80	80	80
6-strip Sample tube	100	100	100
Elution tubes	480	480	480
6-strip Plug	N/A	N/A	100
Screw tube	N/A	50	N/A
RLL	450 ml	N/A	N/A
RVLL	N/A	3 x 160 ml	N/A
DLL	N/A	N/A	1 x 160 ml 1 x 200 ml
LTL	N/A	N/A	420 ml
LRW1 (concentrate)	4 x 175 ml	N/A	N/A
LRW2	1 x 500 ml	N/A	N/A
LW1 (concentrate)	N/A	4 x 175 ml	4 x 175 ml
dCCEB	2 x 500 ml	2 x 500 ml	2 x 500 ml (CCEB)
Proteinase K	N/A	2 x 5 ml	4 x 5 ml
BE solution	N/A	3 x 1.6 ml	N/A
RS solution	N/A	1 x 6 ml	N/A
Handbook	1	1	1

Sample Application

LabTurbo kits can effectively purify cellular, viral, bacterial, fungal, tissue, plant, and circulation DNA, RNA from a broad variety of samples such as blood, blood cells, buffy coat, cultured cells, plasma, serum, culture medium, urine, sputum, stool, bronchoalveolar lavage (BAL), synovial fluids, buccal swab, pharyngeal swab, vaginal swab, forensic samples (cigarette butts; blood stain; straw; tape; chewing gum), fixed tissue (FFRE), plant (rice; wheat; leave; seed), fish, or food products.





Kit Storage

All components including proteinase K can be stored at room temperature (15 – 25°C) at least until the expiration date.

Kit Description

All LabTurbo Kits use silica membrane-chaotropic technology for simultaneous purification of high-quality DNA/RNA from a wide range of starting materials. The kits are designed for automated processing on LabTurbo 24 and 48 Compact System. Purified nucleic acids are free of proteins, nucleases, and other impurities which are ready to use for highly sensitive detection in downstream assays, such as PCR, real-time PCR, or other enzymatic reactions.

Quality Control

LabTurbo Kits are developed by Taigen Bioscience Corporation. The performance of LabTurbo Kits is inspected and tested routinely on a batch-to-batch basis in our QC laboratory. All components and plastic consumables of LabTurbo Kits are validated by

visual, physical, DNase free, RNase free, human genomic DNA free, purity, yield and sensitivity, et.al with appropriate sample types, reagent, physical, and biochemical methods prior to the shipment.

Product Use Limitations

LabTurbo kits are intended for research purposes; the clinical use should be validated by the user self or regulated with the law of local government. All kit components should be handled with care and attention described in this handbook. Waste should be disposed of properly in accordance with all local and regional regulations.

Product Warranty and Satisfaction Guarantee

Taigen Bioscience Corporation guarantees the performance of all products in the manner described in our product manual. It is the user's responsibility to ascertain the suitability of the product for its particular use. Taigen Bioscience reserves the right to alter any product or element with this product to improve operating ease and performance.

Technical Assistance

At Taigen Bioscience Corporation, we are proud of product quality and technical support. For technical assistance, contact our department of application and customer service.

Safety Information

When working with chemicals and potentially infective pathogen, always wear a suitable lab coat, disposable gloves, and protective goggles. Material Safety Data Sheets for all components of LabTurbo Kits can be requested by emailing Taigen Bioscience.

During the extraction procedures, the waste may contain guanidine salts from Buffers DLL, VLL, and LW1. Avoid mixing of bleach with the waste. If any liquid from the following buffer is spilt, clean with suitable detergent and water. If the spilt contains

potentially infectious agents, clean the affected areas with 5% bleach.

Buffer DLL, VLL, and LW1

Contain guanidine hydrochloride: harmful if swallowed; irritating to eyes and skin.

Proteinase K

Sensitizer, irritant. Please wear suitable protective clothing and gloves.

Preparation of Working Buffers in Kit

Buffer LW1

Add 230 ml of ethanol (96 – 100%) to a bottle containing 175 ml of Buffer LW1 concentrate, as described on the bottle, and mark it. Between runs, store the reconstituted Buffer LW1 at room temperature (15 – 25°C), and always mix Buffer LW1 by gentle shaking before use.

Buffer VLL

Add 1.75 ml of BE solution to 175 ml of VLL to be the concentration 1% v/v of BE in VLL before use. Store the reconstituted Buffer VLL at room temperature (15 – 25°C) for two months.

Notes

- Proteinase K, DLL/LRW2 buffer, CCEB, and dCCEB are all ready to use.
- If any precipitate has formed in Buffer DLL/VLL, dissolve by incubating at 70°C.
- For RNA extraction, fresh or frozen tissues can be used. Tissues can be stored at –70°C for several months. Flash-freeze tissues in liquid nitrogen, and immediately transfer to –70°C. Do not allow tissues to thaw during weighing or handling prior to disruption in Buffer RLL.
- Ensure that 96-100% EtOH is added to Buffer LW1 concentrate according to the indication on the LW1 bottle.
- Ensure that 1.75ml of BE solution is added to 175 ml Buffer VLL.
- To ensure all automation processes go smoothly, please use the sample tube and elution tube supplied with the kit; **It is not allowed to use the tube supplied**

other than in kit.

- All centrifugation steps are carried out at room temperature, if necessary.
- Before using LabTurbo workstation, read the user manual carefully.

Equipment and Reagents to Be Supplied by User

- LabTurbo 24 or 48 Compact System
- LabTurbo robotic filtered tips (1100 µl) cat. No. S0510
- Ethanol
- LTL (offered separately; for tissue DNA lysis)
- β-mercaptoethanol (for RNA extraction)
- DNase I (for RNA extraction)
- Homogenizer

Sample preparation of automatic starting materials

Please contact us directly or your local distributor for sample preparations.

Sample type: Human/animal tissues

Sample type: Human serum/plasma

Sample type: Human whole blood

Sample type: Human buffy coat

Sample type: Cultured cell

Sample type: Oral swab/Genital swab

Sample type: Forensic samples (Cigarette butt, swab, straw, glove, etc)

Sample type: Gram-negative bacteria in urine

Sample type: bronchoalveolar lavage (BAL) fluid

Sample type: Formalin-fixed, paraffin embedded tissue

Sample type: Sputum

Sample type: Stool

Sample type: Vaccine

Technical Support

For more information or technical assistance, call or email our Technical Service

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Pioneer of Automated
DNA/RNA Purification

