Democratizing Molecular Biology: *PDQeX Nucleic Acid Extractor*

MicroGEM

PDQeX Nucleic Acid Extractor: Quick Start Guide

MicroGEM's PDQeX Nucleic Acid Extractor brings together powerful enzymes with an innovative extractor cartridge and purification matrix. The temperature-driven single-tube system produces extracts in significantly less time (minutes, not hours) than other extraction methods.

Perfect for a wide range of sample types including:

Plant material   **Animal tissue**   **Forensic evidence and human ID**   **Bacteria**   **Viruses**   **Insects**

Find complete operating instructions and device specifications at

www.microgembio.com/product/pdqex-nucleic-acid-extractor/

Process Overview

Step 1: Sample preparation

Refer to each kit 's Quick Start Guide for specific sample preparation guidelines.

Step 2: Cell lysis, DNA extraction and purification

This multi-stage process takes place inside the extractor cartridge. The entire process takes between 7 to 20 minutes to produce DNA extracts.

Step 3: Quantification

The DNA is now ready for quantification. Because the heat step denatures the DNA, do not use OD or fluorescent dye methods. The best method for quantification is qPCR. With normalized samples, quantification is not always required and the DNA can be used directly.
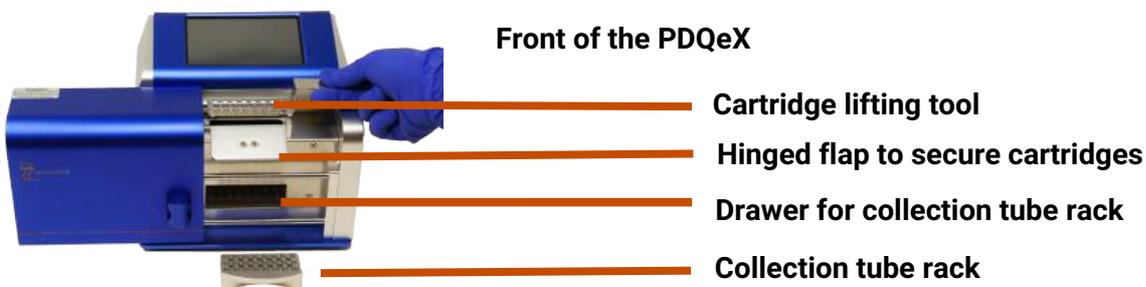
Device set-up

Connect the PDQeX to the power supply and switch on. Only use the power supply provided with the PDQeX.

Back of the PDQeX

USB port   On/Off   24V power input socket

Front of the PDQeX

Cartridge lifting tool

Hinged flap to secure cartridges

Drawer for collection tube rack

Collection tube rack

Operating Overview

1

The door of the PDQeX slides horizontally left and right. The door will lock during operation or UV decontamination.

Before inserting any cartridges into the block, ensure the lifting tool is in place, making it easier to remove spent cartridges after the run is complete.
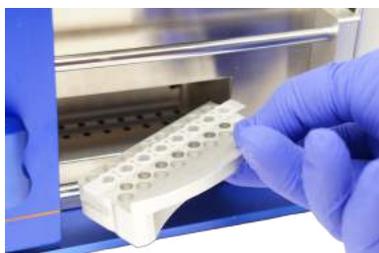

2

Pull out the collection tube rack and place 0.2 ml PCR tubes firmly into the rack.

The rack will accommodate up to three 8-strip PCR tubes.

Remember where you have placed the collection tubes. You will need to place the cartridges in the same position in the cartridge block.

3

Replace the rack into its slot in the PDQeX and firmly push into place.

4

Load your sample into the PDQeX extractor cartridge.

This part of the procedure differs depending on the sample type. The sample may be in suspension, a solid or a disk of storage card.
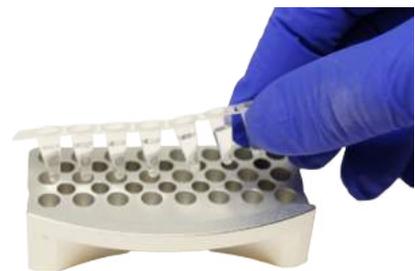
Insert the cap into the cartridge.

5

Load the cartridges into the holes of the cartridge tray in the same position where you placed the collection tubes.

When all the cartridges are loaded, lower the hinged flap onto the caps of the cartridges and close the sliding door. Start the program.

6

When the program is finished, remove the PDQeX extractor cartridges and dispose. Slide out the drawer.

Remove and cap the collection tubes and store at -20˚ C.

Find programming, cleaning, maintenance, and disposal information at

www.microgembio.com/product/pdqex-nucleic-acid-extractor/

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To find a distributor near you, visit https://microgembio.com/contact-microgem/.

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vibrant, sustainable world.

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