VERSION 2

NOV 30, 2020

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.bp9gmr3w

External link:
<https://www.neb.com/protocols/2015/12/08/quick-protocol-for-monarch-dna-gel-extraction-kit-t1020>

Protocol Citation: New England Biolabs 2020. Quick Protocol for Monarch® DNA Gel Extraction Kit (NEB #T1020). **protocols.io** <https://dx.doi.org/10.17504/protocols.io.bp9gmr3w> Version created by Lenny Teytelman

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
 We use this protocol and it's working

Created: Nov 30, 2020

Quick Protocol for Monarch® DNA Gel Extraction Kit (NEB #T1020) V.2

New England Biolabs¹

¹New England Biolabs

New England Biolabs (NEB)

Tech. support phone: +1(800)632-7799 email: info@neb.com

Isabel Gautreau
 New England Biolabs

ABSTRACT

This is the quick version of the Monarch® DNA Gel Extraction Kit Protocol (NEB #T1020). For the full protocol, please click [here](#).

GUIDELINES

For detailed protocol and more information, visit www.neb.com/T1020

The full protocol is available [here](#).

A video protocol is available [here](#).

MATERIALS

MATERIALS

Monarch® DNA Gel Extraction Kit New England Biolabs Catalog #T1020

BEFORE START INSTRUCTIONS

Please review the important information under the “Guidelines” tab before beginning.

Add 4 volumes of ethanol ($\geq 95\%$) to one volume of DNA Wash Buffer.

- For 50-prep kit, add 20 ml of ethanol to 5 ml of Monarch DNA Wash Buffer
 - For 250-prep kit, add 100 ml of ethanol to 25 ml of Monarch DNA Wash Buffer
- All centrifugation steps should be carried out at 16,000 x g (~13,000 RPM).

Please note: column holds 800 μ l

Last Modified: May 14, 2021

PROTOCOL integer ID:
45064

Keywords: Extracting, Monarch DNA Gel Extracting Kit, extracting dna, gel extraction, extraction from gel

- 1 Excise the DNA fragment from the agarose gel, taking care to trim excess agarose. Transfer to a 1.5 ml microfuge tube and weigh the gel slice.** Minimize exposure to UV light.

Note

Trim/remove excess agarose and minimize exposure to UV light.

- 2 Add 4 volumes of Gel Dissolving Buffer to the gel slice** (e.g., 400 µl buffer per 100 µl or 100 mg agarose).

- 3 Incubate the sample between 37–55°C (typically 50°C), until the gel slice is completely dissolved** (generally 5–10 minutes). The time that takes a gel slice to melt depends on the size of the slice, the temperature used in the incubation as well as the percent agarose used in the gel. The time recommended above should be used just as a guideline.

Note

For DNA fragments > 8 kb, an additional 1.5 volumes of water should be added after the slice is dissolved to mitigate the tighter binding of larger pieces of DNA (e.g., 100 µl gel slice: 400 µl Gel Dissolving Buffer: 150 µl water).

- 4 Insert column into collection tube and load sample onto the column. Spin for 1 minute at 16,000 x g, then discard flow-through.**

00:01:00

- 5 Re-insert column into collection tube. Add 200 µl DNA Wash Buffer (with ethanol added) and spin for 1 minute at 16,000 x g.** Discarding flow-through is optional.

00:01:00

- 6 Repeat Step 5** (Step 5: Re-insert column into collection tube. Add 200 µl DNA Wash Buffer and spin for 1 minute at 16,000 x g. Discarding flow-through is optional).

00:01:00

- 7 Transfer column to a clean 1.5 ml microfuge tube.** Use care to ensure that the tip of the column does not come into contact with the flow-through. If in doubt, re-spin for 1 minute.

Note

Use care to ensure that the tip of the column does not come into contact with the flow-through. If in doubt, re-spin for 1 minute.

- 8 Add ≥ 6 µl of DNA Elution Buffer to the center of the matrix. Wait for 1 minute, and spin for 1 minute at 16,000 x g to elute the DNA.**

00:02:00

Note

Typical elution volumes are 6–20 µl. Nuclease-free water (pH 7–8.5) can also be used to elute the DNA. Yield may slightly increase if a larger volume of DNA Elution Buffer is used, but the DNA will be less concentrated. For larger size DNA (≥ 10 kb), heating the elution buffer to 50°C prior to use can improve yield.