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Protocol for Exonuclease III (NEB #M0206)

New England Biolabs¹¹New England Biolabs**1** Works for me This protocol is published without a DOI.**New England Biolabs (NEB)**Tech. support phone: +1(800)632-7799 email: info@neb.com New England Biolabs Tech Support
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ABSTRACT

Exonuclease III efficiently degrades nicked and linear dsDNA (with blunt or 5' overhangs) from 3' to 5' direction, leaving supercoiled dsDNA intact.*

***Note:** For more precise results or partial digestions, we recommend titration of the enzyme to the intended substrate.

EXTERNAL LINK

<https://neb.com/protocols/2019/07/24/protocol-for-exonuclease-iii-m0206>

PROTOCOL CITATION

New England Biolabs 2020. Protocol for Exonuclease III (NEB #M0206). protocols.io
<https://protocols.io/view/protocol-for-exonuclease-iii-neb-m0206-7r9hm96>

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<https://neb.com/protocols/2019/07/24/protocol-for-exonuclease-iii-m0206>

LICENSE

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LAST MODIFIED

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OWNERSHIP HISTORY

Sep 27, 2019 Anita Broellochs protocols.ioJun 18, 2020 New England Biolabs Tech Support [New England Biolabs](https://neb.com)

PROTOCOL INTEGER ID

28193

MATERIALS

NAME	CATALOG #	VENDOR
EDTA	17892	Thermo Fisher
Exonuclease III (E. coli)	M0206	New England Biolabs

SAFETY WARNINGS

Please see SDS (Safety Data Sheet) for hazards and safety warnings.

1 

Set-up the reaction as follows:

COMPONENTS	50 µl REACTION
DNA	up to 5 µg
NEBuffer 1 (10x)	5 µl (1X)
Exonuclease III	0.5 µl (50 units)
Nuclease-free H ₂ O	up to 50 µl

2 

Incubate at  **37 °C** for  **00:30:00** .

3 Stop reaction by adding *EDTA* to at least  **11 Milimolar (mM)** .

4 Heat inactivate at  **70 °C** for  **00:30:00** .

5 To clean up treated samples, we recommend using one of the following steps:

- Column clean up (we recommend the [Monarch® PCR & DNA Cleanup Kit, NEB #T1030](#)), or
- Running the reaction on an agarose gel, and then extracting the DNA (we recommend the [Monarch Gel Extraction Kit, NEB #T1020](#)), or
- Performing a phenol/chloroform extraction followed by ethanol precipitation.