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Enzymatic PCR Cleanup Protocol (NEB #M0525) V.1

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Protocol status: Working

We use this protocol and it's working

Created: September 27, 2019

Last Modified: March 29, 2021

Protocol Integer ID: 28188

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Abstract

Enzymatic PCR Cleanup Protocol (NEB #M0525) uses Quick CIP; Quick CIP is a heat-labile version of calf intestinal alkaline phosphatase (CIP) purified from a recombinant source.

Features

- Rapid and irreversible heat inactivation eliminates unwanted activity
- Improved storage stability versus native enzyme
- Faster reaction setup (no supplemental additives like zinc required) and shorter incubation time
- Flexible reaction conditions (active in any restriction enzyme buffer, no clean-up required)
- Less enzyme required (high specific activity), resulting in a lower cost per reaction
- No need for multiple phosphatases (Quick CIP removes 5'- and 3'- phosphates from DNA, RNA and dNTPs)
- Active on unincorporated dNTPs in PCR products - improves DNA sequencing and SNP analysis
- Recombinant for purity, consistency and value

Materials

MATERIALS

- ⊗ Quick CIP New England Biolabs Catalog #M0525
- ⊗ Exonuclease I (E. coli) New England Biolabs Catalog #M0293
- ⊗ Shrimp Alkaline Phosphatase (rSAP) New England Biolabs Catalog #M0371

Safety warnings

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





- 1 Add  1 μL of Quick CIP (**NEB #M0525**) to  5 μL of PCR product. 

Note

Note that 0.5 μL of Exo I (**NEB #M0293**) and 1 μL of rSAP (**NEB #M0371**) can be used in the same volume.

- 2 Incubate the mix at the  37 °C for  00:15:00 . 

- 3 Inactivate both enzymes at  80 °C for  00:15:00 .

- 4 PCR products are ready for downstream application.