Microzone Product Datasheet

Product code: 2MCLX-1 Lot Number:

# microCLEAN XL - Long Range PCR Clean Up

| P. Code | Number of Rxn | Component | Description | Lot Number | Expiry |
|---|---|---|---|---|---|
| 2MCLX-1 | 50 x 40 µL | microCLEAN XL 1 x 1 mL | Solution for the clean up of Long Range PCR products | | |

## Applications

- Part of the workflow for: NGS library preparation, cloning, genomic research, detection of gene mutations and gene deletions, gene expression and more.

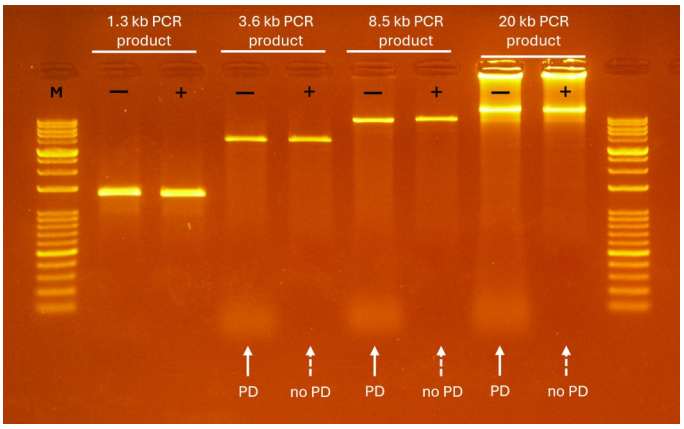
## Product Description

Part of the 'Free From' Microzone range, microCLEAN XL requires less than 15 minutes to efficiently remove unwanted residual dNTPs, primer-dimers, enzymes, unincorporated dyes, etc, from PCR products larger than 1 kb to be used for downstream applications. microCLEAN XL allows the rapid removal of contaminants generating PCR products suitable for sequencing, cloning, NGS library preparation, genomic research and other enzymatic techniques.

The process does not involve the use of solvents or other harmful chemicals, enzymes, nor spin columns or magnetic beads which are usually required in traditional PCR clean up methods. It is a quick and simple protocol with minimal requirements for equipment and plasticware, significantly reducing the environmental impact of the process.

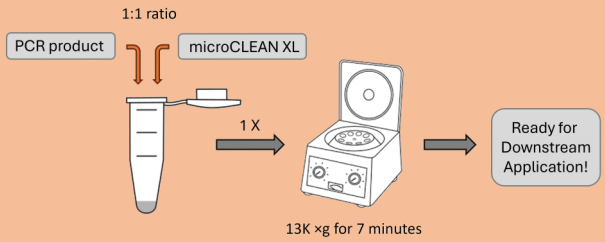
## Key Features

- Highly purified PCR products to be used directly for downstream analysis: NGS, cloning, genomic research, gene expression and more.
- 'Free From' the use of columns, magnetic beads, enzymes and solvents.
- Fast: takes less than 15 minutes.
- Sustainable: only requires a single centrifuge tube, reducing plastic waste compared to traditional purification methods.
- Versatile: simple one-tube centrifugation method allowing use outside of a laboratory.




**No sample loss after clean up with microCLEAN XL.** Long Range PCR products of sizes 1.3 kb, 3.6 kb, 8.5 kb and 20 kb were amplified using MegaMix Crystal High-Fidelity MasterMix and loaded onto 1% agarose gel before (-) or after clean up with microCLEAN XL (+). Solid arrows show presence of primer dimers when samples were not treated with microCLEAN XL; Dashed arrows show primer dimers removal after microCLEAN XL - Long Range PCR clean up. M = 1 kb DNA ladder. PD = Primer Dimer.

## Workflow




## Protocol

1. Add equal volumes of microCLEAN XL and PCR product sample in a microcentrifuge tube.
2. Mix well by pipetting up and down or pulse vortexing.
   **Note:** A 5 minutes incubation may increase yield recovery.
3. Centrifuge at 13,000 ×g for 7 minutes to precipitate PCR amplicons.
   **Note:** Centrifugation will result in an invisible pellet.
4. Remove supernatant.
   **Tip:** Avoid touching the tube walls to not disturb the pellet.
6. Re-centrifuge briefly and remove any remaining liquid.
   **Tip:** Use a P20 pipette to guarantee complete removal of liquid.
7. Resuspend pellet in Molecular Grade Water (such as Microzone's Just Water) or Tris buffer by pipetting or pulse vortexing.
8. Incubate at room temperature for 5 minutes to rehydrate PCR amplicons.
9. Purified PCR products are now ready for further processing or storage.

For research use only

**Product Handling**

**Storage**

To ensure the quality of the product until the expiry date keep at the recommended storage temperature and limit exposure to light.

**Contamination Control**

To prevent erroneous results ensure work environment is free of contamination by cleaning your workstation and equipment daily with a DNA decontaminant, wear gloves, use sterile tubes and filter pipette tips.

Simple | Effective | Efficient

Version 2.01

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