Product Code: 2MN-DTR-X

MAGneat DRT Beads

P. Code	Reactions	Volume	Component	Description	Lot Number	Expiry
2MN-DTR-5/50/250	500/ 5,000/ 25,000	5 mL/ 50 mL/ 250 mL	MAGneat DTR Beads	Paramagnetic beads for dye terminator removal from sequencing reactions.	CXXXXX	YYYY-MM

Application:

- Sanger sequencing reaction dye terminator removal.

Product Description

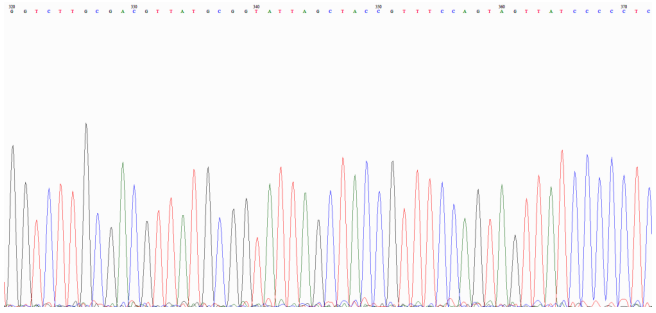
MAGneat DTR Beads is a paramagnetic bead dye terminator removal system. Designed for the efficient and effective removal of dye terminators from Sanger sequencing reactions. Contaminants such as unincorporated dNTPs, salts, primers and enzymes are removed resulting in amplicons suitable for capillary electrophoresis.

The process begins when the amplified products for sequencing are selectively bound to the magnetic beads, the beads are then washed to remove unincorporated dyes and other contaminants, finally the purified products are eluted from the beads ready for sequencing.

It can be coupled with MAGneat Separators for optimal manual performance or automated on systems such as the HeiDi-NA extraction system for reduced hands on time.

Key Features:

- Rapid - less than 25 minutes processing time
- Simple to use - no filtration or centrifugation required
- Automatable - compatible with automated systems such as Microzone's HeiDi-NA
- High Quality - Long continuous reads and dye blob removal
- Scalable - centrifuge tube, 96- and 384-wells plate format



MAGneat DTR Beads improve quality of DNA sequencing. Sanger sequencing of *E. coli* gene. Sequence shown is region of bases between 320 to 372 bp. Dye removal with MAGneat DTR beads enhances signal intensity, improves Quality Score (QS), Continuous Read Length (CRL) and eliminates dye blobs, background interference and base miscalls.

Protocol

Before use place MAGneat PCR beads at room temperature for 30 minutes.

1. Mix the MAGneat beads thoroughly to fully resuspend magnetic beads.
2. Transfer sequencing reaction to a suitable tube or plate.
3. Add 10 µL of MAGneat DTR beads regardless of the volume of sequencing reaction.
4. Add 85% ethanol according to the table below and mix well.

Reaction volume (µL)	Ethanol (µL)
5	30
10	40
15	50
20	60

5. Place the tube on the magnetic separator for 3 minutes or until the solution is clear of beads.
6. With the sample still on the separator, remove the supernatant by pipetting.
7. Leaving the tube on the magnetic rack, add 100 µL of 85% ethanol to the tube to wash the pellet.
8. Remove the supernatant.
9. Repeat steps 7 and 8 for a total of **2** washes.
10. Air dry the beads for 5 minutes at room temperature. It is critical to completely remove all liquid.
11. Remove the tube from the magnet and add 40 µL of 0.1 mM EDTA or molecular grade water and mix well.
12. Incubate at room temperature for 5 minutes.
13. Place the tube on the magnetic separator for 3 minutes or until the solution is clear of beads.
14. Remove 30-35 µL of eluate (clear supernatant) and transfer to a new tube, ready to be loaded onto sequencer.

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 with a DNA decontaminant daily, wear gloves, use sterile tubes and filter pipette tips.

Simple | Effective | Efficient

Version 2.04

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