# **Magnetic Beads PCR Cleanup Kit**

Store at Room Temperature

Tor research use only
Catalogue Numbers
10010

MC048 MC096 Quantity 48 rxns 96 rxns



#### Introduction

The Magnetic Beads PCR Cleanup Kit was designed to recover or concentrate DNA fragments from PCR or other enzymatic reactions. DNA is bound to the surface of the magnetic beads and released using a proprietary buffer system. The Magnetic Beads PCR Cleanup Kit can be easily adapted to automated magnetic bead separation instruments and workstations. The purified DNA can be used in a variety of downstream applications.

#### **Quality Control**

The quality of the the Magnetic Beads PCR Cleanup Kit is tested on a lot-to-lot basis according to Geneaid's ISO-certified quality management system. DNA fragments are purified from PCR products and analyzed by electrophoresis.

#### Advantages

- High Yield: >70% recovery
- High Quality DNA: A260/A280 = 1.8-2.0
- Broad Fragment Size Range: 100 bp-10 kb
- · Easily adapted to automated magnetic bead separation instruments and workstations
- Sample: up to 100 µl of PCR products
- Operation time: within 20 minutes (manual)
- Storage: dry at room temperature (15-25°C) for up to 1 year

#### Caution

During operation, always wear a lab coat, disposable gloves, protective goggles and (anti-fog) procedure mask.

#### **Components and Storage**

Item	Volume	Product	Shipping	Storage
MC Buffer	3 ml	MC004	room temperature	dry at room temperature (15-25°C)
	50 ml	MC048		
	80 ml	MC096		
MW1 Buffer	2 ml	MC004	room temperature	dry at room temperature (15-25°C)
	20 ml	MC048		
	45 ml	MC096		
MW2 Buffer <sup>1</sup> (Add Ethanol)	1 ml (4 ml)	MC004	room temperature	dry at room temperature (15-25°C)
	12.5 ml (50 ml)	MC048		
	25 ml (100 ml)	MC096		
MC Magnetic Beads	50 μl	MC004	room temperature	dry at room temperature (15-25°C)
	500 μl	MC048		
	1 ml	MC096		
Elution Buffer	1 ml	MC004	room temperature	dry at room temperature (15-25°C)
	6 ml	MC048		
	6 ml	MC096		

<sup>1</sup>Add absolute ethanol (see the bottle label for volume) to MW2 Buffer then mix by shaking for a few seconds. Check the box on the bottle. Be sure and close the bottle tightly after each use to avoid ethanol evaporation.

## Magnetic Beads PCR Cleanup Kit Protocol Procedure

### IMPORTANT BEFORE USE:

1. Vortex magnetic beads to ensure they are in suspension prior to initial use.

2. Be sure and allow magnetic beads to disperse completely during the binding, wash and elution steps.

3. Add absolute ethanol (see the bottle label for volume) to MW2 Buffer then mix by shaking for a few seconds. Check the box on the bottle. Be sure and close the bottle tightly after each use to avoid ethanol evaporation.

Additional requirements: absolute ethanol, microcentrifuge tubes, magnetic separator, isopropanol

- 1. Transfer 100 µl of PCR product to a 1.5 ml microcentrifuge tube.
- 2. Add 500 µl of MC Buffer (5 volumes of PCR product) to the sample.
- 3. Add 10 µl of MC Magnetic Beads to the sample then gently shake the tube for 5 minutes to mix.
- 4. Place the tube in a magnetic separator for 30 seconds or until MC Magnetic Beads have pelleted.
- 5. Remove and discard the cleared supernatant.
- 6. Add 400 µl of MW1 Buffer then gently shake the tube for 1 minute.
- 7. Place the tube in a magnetic separator for 30 seconds or until MC Magnetic Beads have pelleted.
- 8. Remove and discard the cleared supernatant.

9. Add 600 µl of MW2 Buffer (make sure ethanol was added) then gently shake the tube for 1 minute.

**10**. Place the tube in a magnetic separator for 30 seconds or until **MC Magnetic Beads** have pelleted.

**11**. Remove and discard the clear supernatant.

12. Incubate the tube on a 60°C hot plate or oven for 5 minutes to dry the MC Magnetic Beads.

**13**. Add **50** µl of Elution Buffer then mix the sample by pipetting and incubate the sample for 5 minutes.

NOTE: During incubation, invert the tube occasionally to ensure MC Magnetic Beads remain in suspension.

**14**. Place the tube in a magnetic separator for 30 seconds or until **MC Magnetic Beads** have pelleted.

15. Transfer the supernatant containing the purified DNA to a clean 1.5 ml microcentrifuge tube.