April 2021

Code No. KN-T14CK04

KANEKA Microbial DNA Extraction Reagent

Instructions for Use

Cautions

- KANEKA Microbial DNA Extraction Reagent is intended for research applications. Do not use the reagent for medical or clinical purposes in humans or animals. Moreover, do not use the reagent as food, cosmetics, or household products.
- KANEKA Microbial DNA Extraction Reagent uses alkaline reagent. When using or disposing of the reagent, always follow general laboratory precautions, such as wearing protective equipment (e.g., protective gloves and safety glasses), and pay attention to safety.
- If the reagent accidentally gets into your eye or on your skin, perform first aid, such as washing your eye or skin thoroughly, and, if necessary, seek medical attention.

1. Features

KANEKA Microbial DNA Extraction Reagent is a kit to extract a template DNA from microorganisms that can be used in a nucleic acid amplification technique, such as PCR or real-time PCR, in about 10 minutes.

Components (for 20 tests)		
Solution A	400 µL	1 vial
Solution B	800 µL	2 vials

2. Storage conditions/expiration date

- Storage conditions: Store at 2˚C to 30˚C away from direct sunlight.
- Expiration date: Indicated on the product box.

3. How to use

[Applicable specimens]

A broth medium cultured in liquid medium or colonies grown in a solid medium

- Broth medium equivalent to McFarland No. 0.5 to 1
- Bacterial suspension prepared with colonies in sterile distilled water so that they are equivalent to McFarland No. 0.5 to 1.

<For liquid medium>

(1) Transfer 20 µL of a broth medium equivalent to McFarland No. 0.5 to 1 into a microtube, mix with 20 µL of solution A, then heat the mixture at 98˚C for 10 minutes on a heat block

or other heating equipment.*1

(2) After cooling the mixture to room temperature, add 80 µL of solution B and use the resulting mixture as DNA extract.

*1. It is recommended to use a cap lock or similar product because the microtube lid may open while heated.

<For colonies>

(1) Pick up the colonies with a platinum loop and suspend them in sterile distilled water (approximately 500 µL) so that they are equivalent to McFarland No. 0.5 to 1. *2

(2) Transfer 20 µL of bacterial suspension to a microtube, mix with 20 µL of solution A, then heat the mixture at 98˚C for 10 minutes on a heat block or other heating equipment.

(3) After cooling the mixture to room temperature, add 80 µL of solution B and use the resulting mixture as DNA extract.

*2. When collecting colonies, be careful not to scrape up the solid medium with the colonies.

Precautions for use

1. KANEKA Microbial DNA Extraction Reagent uses an alkaline reagent. When using or disposing of KANEKA Microbial DNA Extraction Reagent, wear protective equipment (such as protective gloves and safety glasses) and always follow the general precautions in your institution while paying attention to safety. If the reagent accidentally gets into your eye or on your skin, perform first aid, such as washing your eye or skin thoroughly, and, if necessary, seek medical attention.
2. If you are unable to extract DNA using the above protocol, changing the amount of the specimen may help.
3. When the extract is not used right away, store at −20˚C.

Warranty

The responsibility of Kaneka Corporation is limited to the replacement of the product in case of product failure. Kaneka Corporation is not responsible, whether directly or indirectly, for any other damages. Thank you for your understanding.

How to dispose of

Always wear protective equipment (such as protective gloves and safety glasses) when using KANEKA Microbial DNA Extraction Reagent.

- Residual waste: For small amounts, absorb the reagent using a piece of paper towel or a rag and dispose of it by incineration.
- Contaminant container and package: When disposing of an empty container, remove the content completely before disposal.

Contact information

For inquiries, contact Kaneka Corporation.

TEL: 81-79-445-2406 (Business hours: Monday through Friday 9:00 to 17:00, excluding holidays)

URL: https://www.kaneka-labtest.com