# Quick PCR Purification and Gel Extraction Kit

**Catalog No.**: K004

**Size**: 50 T/200 T

**Storage**: Store at room temperature for one year.

## Kit Contents :

| Size | 50T | 200T | Storage |
|---|---|---|---|
| Buffer PB (for PCR Purification) | 15 ml | 60 ml | RT |
| Buffer QG (for Gel Extraction) | 30 ml | 120 ml | RT |
| Buffer PE | 15 ml | 60 ml | RT |
| Spin Column CM | 50 pcs | 200 pcs | RT |

## Safety Information :

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles.
Buffer PB contains guanidine hydrochloride, which can form highly reactive compounds when combined with bleach. In case liquid containing this buffer is spilt, clean with suitable laboratory detergent and water. If the spilt liquid contains potentially infectious agents, clean the affected area first with laboratory detergent and water, and then with 1 % (v/v) sodium hypochlorite.

## Introduction:

Fine quick Kits is designed to extract high-quality DNA of 70 bp to 10 kb from PCR reactions, standard or low-melt agarose gels for molecular biology experiments. Up to 400 mg agarose gel can be processed per spin column.

## Preparation :

1. Add ethyl alcohol to PE Buffer bottle to make the ethanol final concentration 80% v/v.
2. 1.5ml centrifuge tube
3. Isopropanol

## Procedure :

1. For PCR purification, Add 5 volumes of Buffer PB to 1 volume of the PCR sample and mix. For example, add 500 µl of Buffer PB to 100 µl PCR samples (not including oil). Then to Step 3.
2. For gel extraction, Excise the DNA fragment from the agarose gel with a clean, sharp scalpel.Weigh the gel slice in a colorless tube. Add 3 volumes of Buffer QG to 1 volume of gel(100 mg ~ 100 µl). For >2% agarose gels, add

6 volumes of Buffer QG. The maximum amount of gel slice per column is 400 mg.Incubate at 50°C for 10 min (or until the gel slice has completely dissolved). To help dissolve gel, mix by vortexing the tube every 2–3 min during the incubation.

**NOTE:** Solubilize agarose completely. For >2% gels, increase incubation time. After the gel slice has dissolved completely, add 1 gel volume of isopropanol to the sample and mix.Then to Step 3.

3. Place a spin column in a provided 2 ml collection tube.
4. To bind DNA, apply the sample to the column and centrifuge for 30–60 s.
5. Discard flow-through. Place the column back into the same tube.
   For gel extraction, recommended: Add 0.5 ml of Buffer QG to column and centrifuge for 1 min.This step will remove all traces of agarose. It is only required when the DNA will subsequently be used for direct sequencing, in vitro transcription, or microinjection.
6. To wash, add 0.75 ml Buffer PE to the column and centrifuge for 30–60 s.
7. Discard flow-through and place the column back in the same tube. Centrifuge the column for an additional 1 min.

**NOTE:** Residual ethanol from Buffer PE will not be completely removed unless the flow-through is discarded before this additional centrifugation.

8. Place the column in a clean 1.5 ml microcentrifuge tube.
9. To elute DNA, add 50 µl Buffer EB (10 mM Tris-HCl, pH 8.5) or water (pH 7.0–8.5) to the center of the column membrane, let the column stand for 1 min, and then centrifuge the column for 1 min.

**NOTE**: Ensure that the elution buffer is dispensed directly onto the column membrane for complete elution of bound DNA. Elution efficiency is dependent on pH. The maximum elution efficiency is achieved between pH 7.0 and 8.5. When using water, make sure that the pH value is within this range, and store DNA at –20°C as DNA may degrade in the absence of a buffering agent. The purified DNA can also be eluted in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0), but the EDTA may inhibit subsequent enzymatic reactions.

## Extraction Example :

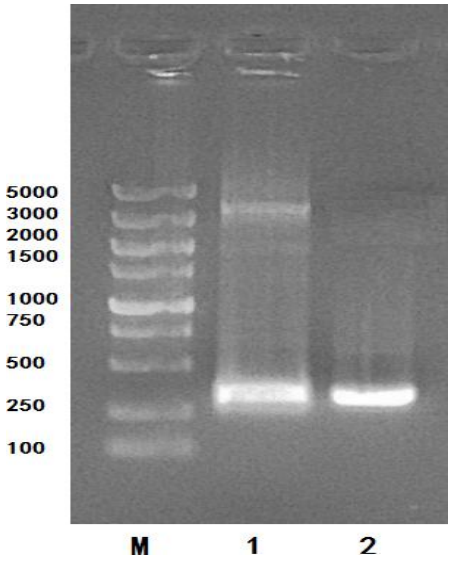


Fig. 1 Example: PCR production extracted by using FineTest Kit.

Lane M: DNA Marker

Lane 1: PCR production before gel recovery.

Lane 2: PCR production after gel recovery.