Quick Protocol

GelJia Kit

Nucleic acid isolation from gel based on silica technology

- MiniPrep

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Kit Content

Component	50 preps	100 preps
RGB	30ml	60ml
GWB	10ml	2 x 10ml
RSB	5ml	10ml
HiPure DR column	50	100
Collection tube	50	100

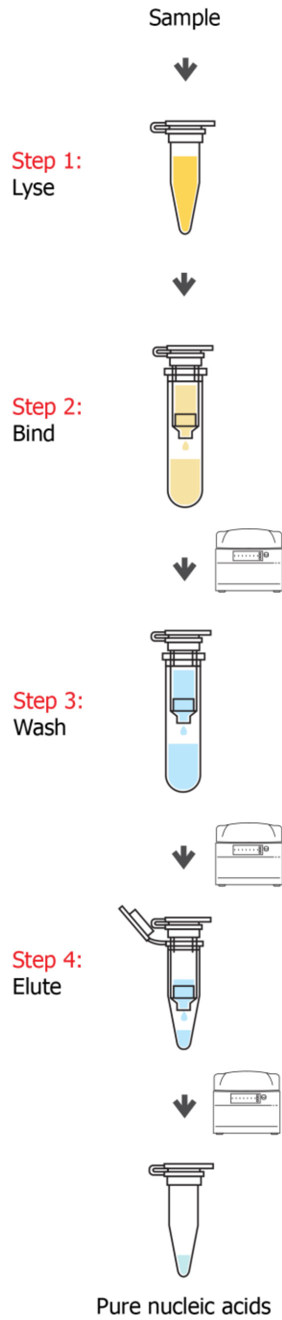
Washing Buffer Preparation

Before the first use, add appropriate amount of ethanol (96-100%) to each washing buffer tube, then mix thoroughly to prepare buffers, refer to Table 1. Do not forget to tick the check box on the bottle label to indicate that ethanol has been added. Before each use mix reconstituted buffer by shaking. Storing at room temperature.

Table 1: buffer preparation

Buffer Name	Concentrated Volume	Amount of Ethanol	Final Volume
GWB	10ml	40ml	50ml

Procedure of silica-based DNA isolation in quick look



Protocol: Isolation of nucleic acid from agarose gel (based on silica technology)

Sample type: DNA bands on agarose gel

Some tips to know:

- All centrifugation steps are carried out at room temperature (15–25°C).
- Not forget to add the appropriate amount of molecular biology grade ethanol (%96–100) to GWB as indicated on the bottle, before using for the first time (refer to buffer preparation section).
- RGB should be yellow, if it turns pink, set the pH to 5.0 by using H_2SO_4.
- If RGB forms precipitate, please warm it to 56°C until the precipitate has fully dissolved.

Process

- Remove the DNA fragment from the %1 agarose gel with a clean, sharp scalpel.

  Note: removing the extra agarose, and try to minimize the size of the gel slice.
- Weigh the gel slice in a colorless tube. Add appropriate RGB amount to the microcentrifuge tube (for each 100mg of gel, add 300µl RGB. For example, if the gel weight is 200 mg add 600µl RGB to the microcentrifuge tube).
- Pulse vortex for 5s and incubate at 50˚C for 10min. During incubation, pulse vortex every 2min.
- After dissolving the gel completely, add one gel volume of absolute ethanol to the microcentrifuge tube (for example for 30mg gel, add 30µl absolute ethanol), pulse vortex for 15s.
- Transfer the solution to a HiPure DR Column placed in a 2ml collection tube (supplied in the kit box). Centrifuge for 1min at 13000 rpm at room temperature. Discard the flow-through.
- Add 750µl prepared GWB to the spin column.

  Optional: For increased DNA concentration, after adding GWB incubate at room temperature (15-25˚C) for 4min.
- Centrifuge for 1min at 13000 rpm at room temperature. Discard the flow-through, and then centrifuge the HiPure DR Column for an additional 1min at 13000 rpm.

- Place the HiPure DR Column in a new 1.5ml microcentrifuge tube. Add 30-50µl RSB directly to the center of spin column; incubate at room temperature (15-25˚C) for 5min. Centrifuge for 1min at 13000 rpm to elute the nucleic acid.