



Frequently Asked Questions for
PurElute™ Bacterial Genomic Kit

About your PurElute™ Bacterial Genomic Kit

1. What is the maximum culture volume to use with the PurElute™ Bacterial Genomic Kit?

PurElute™ Bacterial Genomic Kit is intended for use in the isolation of genomic DNA from 2 ml to 5 ml bacterial cultures with an O.D. of 1.0. Rich growth media such as TB (terrific broth) or 2XYT will produce more bacteria (up to 5 times), but this may not lead to greater yields or higher-quality DNA. PurElute™ Bacterial Genomic Kit

2. What is the expected yield of genomic DNA isolated with the PurElute™ Bacterial Genomic Kit?

The expected yield of genomic DNA isolated from bacteria with the PurElute™ Bacterial Genomic Kit is up to 40 µg of DNA. However yields of genomic DNA will vary depending on bacterial strain, quality of the starting material, growth conditions, and the amount of material processed.

3. How long does it take to isolate DNA using the PurElute™ Bacterial Genomic Kit?

Up to 10 samples can be processed in as little as 15 minutes of hands-on time.

4. What is the recommended optimal elution volume for isolation of genomic DNA using the PurElute™ Bacterial Genomic Kit?

An elution volume of 100µl is recommended for genomic DNA isolated from cultured cells using the PurElute™ Bacterial Genomic Kit. Smaller elution volumes may lower yield due to insufficient resuspension.

5. What are the compositions of the solutions supplied with the PurElute™ Bacterial Genomic Kit?

The compositions of the solutions are proprietary.

6. How do I store the PurElute™ Bacterial Genomic Kit?

Spheroplast Buffer must be stored at -20°C and thawed before use. The other components of the PurElute™ Bacterial Genomic Kit should be stored at 4°C. The kit is stable for up to one year under these conditions.



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6. Is your Bacterial Genomic DNA Purification System comparable with the "homebrew" methods?

The homebrew method entails purifying genomic DNA from an overnight digestion with proteinase K then extracting with phenol: chloroform followed by alcohol precipitation. Using our PurElute™ Bacterial Genomic Kit is faster, safer and contains no harsh chemicals like phenol and chloroform.

7. For what downstream applications can I use the purified sample?

The PurElute™ Bacterial Genomic Kit produces high-quality genomic DNA. The isolated DNA can be used for agarose gel analysis, restriction enzyme digestion and PCR amplification.

8. How can I quantify my genomic DNA purified with the Bacterial Genomic DNA Kit?

Genomic DNA can be accurately quantified by agarose gel electrophoresis, optical density readings at 260nm (OD₂₆₀), and using Invitrogen Quant-it™ Picogreen® dsDNA Assay Kit.

DNA Preparation – Cell Lysis

1. What does a normal lysate look like?

After incubation, the lysate should be clear. A cloudy or turbid lysate indicates an incomplete lysis. This can be due to various reasons including overgrown cells or insufficient mixing during lysis.

2. What do I do if the Lysis 1 solution has precipitated?

Redissolve by warming in 37° C for a few seconds until the precipitate disappears.

DNA Preparation – DNA Elution

1. What is the recommended optimal elution volume for isolation of genomic DNA using the PurElute™ Bacterial Genomic Kit?

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2. If I plan on storing my isolated genomic DNA long term do I need to have EDTA in the buffer?

Yes. Tris is commonly combined with EDTA for long term storage of DNA. EDTA keeps your DNA stable by chelating heavy metals. It is recommended that genomic DNA be stored in neutral to slightly basic buffered solutions (i.e., 10 mM TrisHCl pH 8.5) to remain more stable.

NOTE: EDTA may inhibit some downstream applications such as restriction enzyme reactions

3. How do I perform a DNA precipitation to concentrate my sample?

If the eluted sample is too dilute you may re-precipitate your sample by standard alcohol precipitation. (Sambrook J., and Russell D, (eds) (2001) Molecular Cloning: A Lab Manual. 3rd Ed. 6.25, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

4. How do I ensure the DNA pellet is resuspended?

In order to ensure resuspension the pellet must be completely redissolved. Be sure to wash any DNA off the walls, particularly if using V-bottom tubes. It is recommended to use the standard 1.5 ml micro-centrifuge tubes since the pellets can easily collect at the bottom of the tube.