AnaCell

Agarose Gel Extraction Kit

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Store the kit at +25°C.

Description:

Agarose Gel Extraction Kit is designed for high-yield recovery of DNA from agarose gel with simultaneous removal of primer-dimers, primers, nucleotides, proteins, salt, agarose, ethidium bromide, and other impurities. The preparation is based on a silica-membrane technology for binding DNA in high-salt and elution in low-salt buffer. The kit provides a simple and efficient way to purify DNA in a size range between 100bp and 10kbp. It requires no organic extractions or precipitation and guarantees high and stable recovery rates.

Preparation procedure:

The agarose gel is dissolved in the chaotropic Extraction Buffer followed by a simple binding, washing, and eluting procedure.

Label / Buffer	50 preps	100 preps	Storage Temperature
Extraction Buffer	30 ml	60 ml	Room temperature
Precipitation	10 ml	20 ml	Room temperature
Washing Buffer	70 ml	140 ml	Room temperature
Elution Buffer	3 ml	5 ml	Room temperature
spin column	50 n	100 n	Room temperature

Protocol

1. Excision of the Gel:

• Cut the area of gel containing the DNA fragment.

• Transfer the excised gel to a clean 1.5 ml micro tube.

2 .Sample Preparation:

• Add 3 volumes of **Extraction Buffer** to 1 volume of the sliced gel. For example, add **300 µl Extraction Buffer** to each **100 mg** (approx. 100 µl) gel. For gels containing >2.5 % agarose, add 6 volumes of **Extraction Buffer** per gel volume.

• Incubate at **55** °C for **10 min** with occasional mixing to ensure gel dissolution. If the color of the mixture is orange or red, add **10 µl** of **3M** sodium acetate (pH 5.0) and mix. The color should be turned into yellow.

• Add 1 volume **Precipitation** per gel volume to the dissolved gel and mix well. (**100 mg** gel add **100 µl Precipitation.**

• For purification of DNA fragment sizes smaller than 200bp or larger than 5kbp increase the amount of **Precipitation** to **2 volumes**.

3. Column Loading:

• Place a Spin Column into a 2 ml collection tube.

• Apply the sample mixture into Spin Column.

• Centrifuge at **10,000 g** for **30 sec** in a micro-centrifuge.

• Discard the flow-through.

- Add **300 µl** of **Extraction Buffer** to the Binding column tube and centrifuge for **30 sec**. This step removes any invisible, remaining agarose gel fragment. It is recommended for preparing DNA for sequencing.

4. Column Washing:

• Place the DNA loaded Spin Colum into the used 2 ml tube.

• Apply **700 µl** of **Washing Buffer** to the Spin Column.

• Centrifuge at **10,000 g** for **30 sec** and discard the flow-through.

Optional Secondary Washing: Recommended only for DNA >200bp and if highly purified DNA for DNA sequencing, transfection etc. is required.

• Add **700 µl** of **Washing Buffer** to the Spin Column.

• Centrifuge at **10,000 g** for **30 sec** and discard the flow-through.

• Centrifuge again for **2 min** to remove residual Washing Buffer.

5. Elution:

• Place the Spin Column into a clean 1.5 ml micro tube (not provided in the kit).

• Add **30-50 µl Elution Buffer**.

• Incubate for **3-5 min** at 65 °C temperature.

• Centrifuge at **10,000 g** for **1 min** to elute DNA.

کیت استخراج DNA از ژل آنا سل برای استخراج با بازده بالای DNA از ژل آگاروز و حذف ناخالصی هایی مانند پرایمر، دارمیرها، نوکلئوتید ها، پروتئین ها، نمک ها، اتیدیوم برماید و سایر ناخالصی ها طراحی شده است. عمل خالصی سازی در این کیت بر اساس جذب اسیدهای نوکلئیک به سیلیکا طراحی شده و با استفاده از ستون های مخصوص سریع و بدون دردسر فرایند جداسازی انجام خواهد شد. با استفاده از این کیت بازده بالا و کیفیت استخراج DNA از ژل را تجربه خواهید کرد.

مزایا کیت استخراج ژل

کارایی بالاتر نسبت به نمونه های داخلی و خارجی
قیمت مناسب
استفاده از ستون های ژنومیک جهت استخراج
پشتیبانی و مشاوره پس از فروش

محتویات

Extraction Buffer
Precipitation
Washing Buffer B
Elution Buffer T
sodium acetate