

# **DNA Concentrator Kit**

Base Catalog # P-1006

#### PLEASE READ THIS ENTIRE USER GUIDE BEFORE USE

The DNA Concentrator Kit is very suitable for concentrating DNA from various DNA samples, especially from those with low concentration of DNA such as microdissection samples, paraffinembedded tissues, restriction enzyme digestions, PCR reactions, and home-made minipreps.

DNA size is from 70 bp to 20 kb; DNA quantity from 1 ng to 2  $\mu$ g, optimal between 10 ng and 1  $\mu$ g.

Concentrated DNA is highly pure and ready for direct use in PCR or other down- stream DNA manipulations such as ligation/transformation, sequencing, restriction digestion, microarray analysis, labeling, microinjection, and *in vitro* transcription.



#### KIT CONTENTS

Components	50 samples P-1006-1	100 samples P-1006-2
CA1 (Binding Buffer)	30 ml	2 x 30 ml
CA2 (Wash Buffer)	2.5 ml	2 x 2.5 ml
CA3 (DNA Elution Buffer)	1 ml	2 ml
F-Spin Columns	50	100
F-Collection Tubes	50	100

#### **SHIPPING & STORAGE**

The DNA Concentrator Kit can be stored at room temperature (15-22°C) for up to 1 year.

#### **GENERAL PRODUCT INFORMATION**

**Usage Limitation:** The DNA Concentrator Kit is for research use only and is not intended for diagnostic or therapeutic application.

**Quality Control:** EpigenTek guarantees the performance of all products in the manner described in our product instructions.

**Product Updates:** EpigenTek reserves the right to change or modify any product to enhance its performance and design. The information in this User Guide is subject to change at any time without notice. Be sure to use the latest User Guide for this kit which can be accessed online at <a href="https://www.epigentek.com/datasheet">www.epigentek.com/datasheet</a>.

## A BRIEF OVERVIEW

The DNA Concentrator Kit uses a unique procedure and composition to efficiently concentrate DNA from various DNA samples with low concentration of DNA including those from microdissection samples and paraffin-embedded tissues. The kit has the following features:

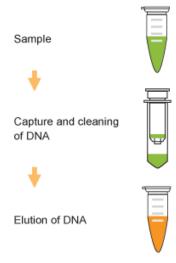
- The fastest procedure available (< 2 minutes).</li>
- Concentrated DNA is ultra-pure with efficient removal of contaminants (salts, proteins, enzymes, nucleotides, and primers).
- User-friendly binding solution and without chaotropic or other irritant reagents.

# **PRINCIPLE & PROCEDURE**

The DNA Concentrator Kit simply applies our proprietary DNA binding buffer to DNA sample. After transferring the sample to the specially designed Fast-Spin Column and washing it with the



washing buffer, the DNA is easily recovered in 8-10  $\mu$ l with elution solution. Concentrated DNA is ready for down-stream application.



Schematic Procedure for Using the DNA Concentrator Kit

## **ASSAY PROTOCOL**

**Note:** Always cap spin columns before placing them in the microcentrifuge.

Before starting, prepare the final wash buffer by adding 20 ml of 100% ethanol to CA2.

- 1. Add 2 volumes of **CA1** to each volume of the DNA sample, and mix well. For example, add 200  $\mu$ l of **CA1** to 100  $\mu$ l of DNA sample. If required volume is less than 100  $\mu$ l, add 100  $\mu$ l of **CA1**.
- 2. Transfer the mixture to the column. Centrifuge at 12,000 rpm for 15 seconds. Discard the flowthrough. Replace the column to the collection tube (*Note*: maximum volume of the column is 600 µl).
- 3. Add 200  $\mu$ l of **CA2** (*final wash buffer*) to the column and centrifuge at 12,000 rpm for 15 seconds. Discard the flowthrough and replace the column to the collection tube. Add 200  $\mu$ l of **CA2** to the column and centrifuge at 12,000 rpm for 30 seconds.
- 4. Place the column in a new 1.5 ml vial. Add 6-8  $\mu$ l of **CA3** directly to the column filter, centrifuge at 12,000 rpm for 20 seconds to elute DNA.

DNA is now ready for use or storage at -20°C.

## **RELATED PRODUCTS**

P-1005	TuMinute™ PCR Clean-Up Kit
P-1068	EpiQuik™ DNA Clean and Concentrator Kit