FitAmp™ Plasma/Serum DNA Isolation Kit

Base Catalog # P-1004

PLEASE READ THIS ENTIRE USER GUIDE BEFORE USE

The *FitAmp*™ kits are very suitable for isolating tiny amounts of DNA from microdissection samples, fresh tissue sections, formalin-fixed and paraffin-embedded tissues, plasma, serum, body fluids, etc. The quality of extracted DNA from formalin-fixed and paraffin-embedded tissues may be affected by the quality of the embedded tissue.

The *FitAmp*™ kits allow isolation of DNA sizes from 100 bp to 20 kb; DNA quantity from 0.1 ng to 2 μg, optimal at between 1 ng and 1 μg.

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KIT CONTENTS

Components	50 samples P-1004-1	100 samples P-1004-2
FA1 (Digestion Solution)	1.1 ml	2 x 1.1 ml
FA2 (Digestion Powder)	1 vial	2 vials
FA3 (DNA Isolation Buffer)	26 ml	2 x 26 ml
FA4 (DNA Elution Solution)	1 ml	2 ml
F-Spin Column	50	100
F-Collection Tube	50	100

SHIPPING & STORAGE

The kit can be stored at room temperature (15-22°C) for 6 months, with the exception of FA2. FA2 should be stored at 0-4°C as soon as it is dissolved in FA1.

GENERAL PRODUCT INFORMATION

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 www.epigentek.com/datasheet.

Usage Limitation: The *FitAmp*™ kits are for research use only and are not intended for diagnostic or therapeutic application.

Intellectual Property: *FitAmp*™ is a trademark of EpigenTek Group, Inc.

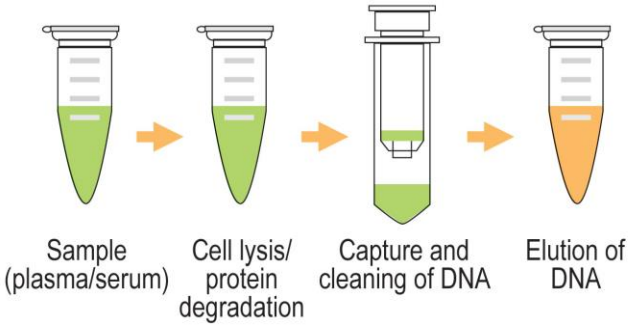
A BRIEF OVERVIEW

The *FitAmp*™ Plasma/Serum DNA Isolation Kit uses a unique procedure and composition to efficiently isolate DNA from plasma, serum, and body fluids. The kit has the following features:

- Extremely fast procedure, which can be finished in less than 15 minutes with consistent isolation conditions.
- High efficiency of DNA isolation from serum, plasma, and body fluids containing a tiny amount of DNA (as low as 0.1 ng).
- Use of non-toxic reagents and no phenol chloroform

PRINCIPLE & PROCEDURE

The FitAmp™ Plasma/Serum DNA Isolation Kit simply applies our proprietary DNA isolation buffer to plasma/serum. After treatment with the DNA digestion buffer, the DNA is easily recovered in 8-20 µl through our specially designed F-Spin Column. DNA is then ready for down-stream application.



Schematic Procedure for Using the *FitAmp™* Plasma/Serum DNA Isolation Kit

PROTOCOL

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

Before starting, prepare the following required solutions (not included):
90% ethanol, and 70% ethanol.

1. Add 1 ml of FA1 to FA2. Vortex until solution is clear. Add 500 µl of FA3 and then 20 µl of the mixed FA1/FA2 solution to 500 µl of plasma/serum or body fluid cell suspension, and mix well. Incubate at 65°C for 10 minutes. Meanwhile, place a spin column into a 2 ml collection tube.

2. Transfer the maximum 500 µl of mixture to the column. Centrifuge at 12,000 rpm for 30 seconds. Discard the flowthrough. Replace the column to the collection tube and transfer remaining volume of mixture to the column. Centrifuge again at 12,000 rpm for 30 seconds. Discard the flowthrough and replace the column to the collection tube.

   Note: If more than 500 µl of sample are used, then steps 1 and 2 can be repeated in increments of 500 µl of the sample (i.e., if 1 ml of sample is being used, process 500 µl of sample through steps 1 and 2 first, then process a the remaining 500 µl through steps 1 and 2 again).

3. Add 300 µl of *70% ethanol* to the column and centrifuge at 12,000 rpm for 20 seconds. Discard the flowthrough and replace the column to the collection tube. Add 200 µl of *90% ethanol* to the column and centrifuge at 12,000 rpm for 20 seconds.

4. Discard the flowthrough and replace the column to the collection tube. Add an additional 200 µl of *90% ethanol* to the column and centrifuge at 12,000 rpm for 40 seconds.

5. Place the column in a new 1.5 ml vial. Add 8-18 µl of FA4 directly to the column filter, and 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-1003	FitAmp™ General Tissue Section DNA Isolation Kit
P-1009	FitAmp™ Paraffin Tissue Section DNA Isolation Kit

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