



E Lysis Buffer

(Cat #10802)

Instruction for manual protocol

ADEMTECH SA
Bioparc BioGalien
27, allée Charles Darwin
33600 PESSAC

France

Tel: +33557020201
Fax +3355702020

Visit our Web site: www.ademtech.com

E Lysis Buffer

Introduction

1. Description

Differential extraction (DE) is the most common method for processing sexual assault samples, allowing for the simultaneous recovery of sperm and epithelial cells from swab or soiled fabric pieces with the separation of sperm cells from epithelial cell DNA by exploiting the differences in the cell membrane susceptibility to detergents. DE uses proteinase K (PK) and an anionic detergent in the E-Lysis Buffer to selectively lyse the epithelial cells. Spermatozoa remain on the sample, and the supernatant containing epithelial cell DNA is removed. Crime Lysis Buffer and the reducing agent dithiothreitol (DTT) are added to the sample for lysis, releasing the male DNA. Both fractions are then used for further downstream analysis to obtain STR profiles of the perpetrator and victim.

The E-lysis procedure coupled with the Crime Prep Adem-Kit was developed to purify specially spermatozoid DNA mixed with epithelial DNA (or non sperm cell DNA).

2. Product Component and storage conditions

Item	E-Lysis Buffer
Cat No.	10802
Package size	1 x 48 samples
E-Lysis Buffer	22mL
Proteinase K (10mg/ml)	440µL

E Lysis Buffer (#10802)	
Reagents	Storage condition
E Lysis Buffer	+2-8°C
Proteinase K (10mg/ml)	+2-8°C

Storage conditions: The kits are shipped at room temperature.

E Lysis Buffer

NOTE 1! Properly stored Kits are guaranteed until the expiry date. Note that shipping is realized at room temperature and will not affect stability. All components of the kit have been prepared under nucleases free conditions and have been thoroughly tested to ensure optimal performance.

NOTE 2! Storage conditions

The E Lysis Buffer can be stored at room temperature. The Proteinase K has to be absolutely stored at +2-8°C.

For convenience, you can store the whole kit at +2-8°C. In this case, before using the kit, it is recommended to take out the reagents in advance and check if there are any precipitates. If the E-Lysis Buffer presents precipitates place it at room temperature and eventually put it at +37°C.

3. Equipment and reagents to be supplied by the user

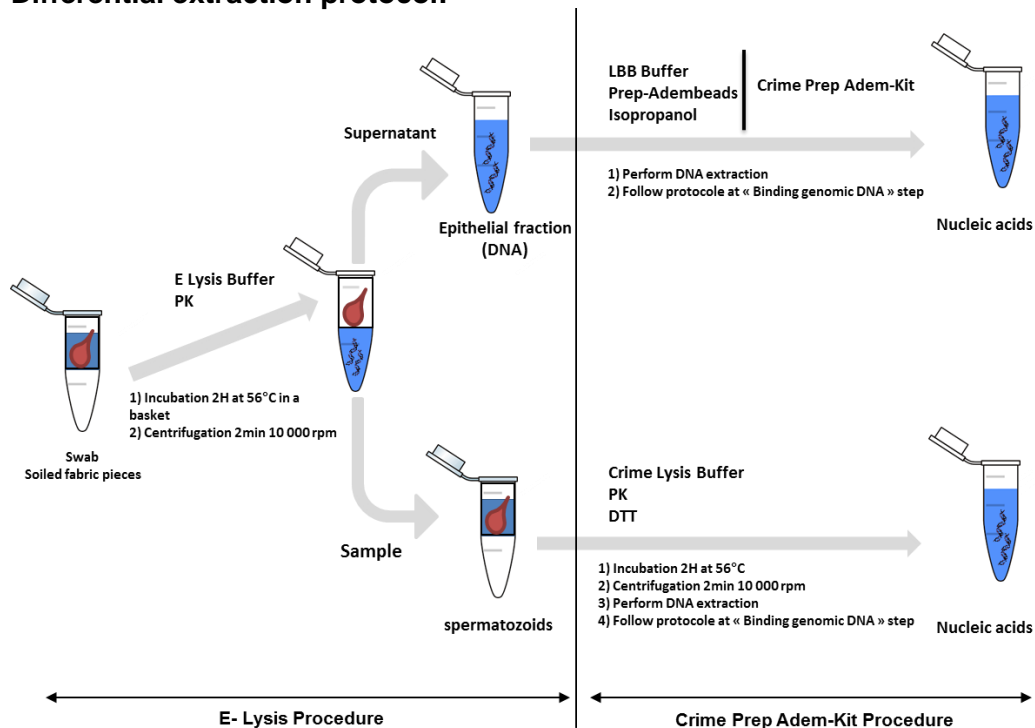
When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. To avoid contamination of your sample, wear face mask.

Materials:

- 56°C heat block, thermomixer or water bath
- Microtubes
- Forensic filters (#12102)
- Centrifuge for microtubes

Differential Cell Lysis Protocol

Differential extraction protocol:



1. Epithelial cells lysis

1. Place the sample in a microtube (break the rod of the swab in order to be able to close the microtube).
2. Add **450µL of ELysis Buffer** to the microtube containing the sample.
3. Add **9µL of Proteinase K** to the microtube containing the sample.
4. Close the tube, homogenize and place it in a thermomixer, then incubate at +56°C and 1000rpm for 2 hours.

E Lysis Buffer

NOTE! It is recommended to prepare a fresh premixed lysis solution by combining 450µL of E-Lysis Buffer and 9µL of Proteinase K per test.

E Lysis Buffer	450µL] X number of extractions
Proteinase K	9µL	

In this case, add 459µL of premixed lysis solution to the microtube containing the sample.

IMPORTANT! You can use a heat block or a water bath instead of a thermomixer. For effective recovery, make sure that the sample is immersed by the lysis solution during incubation.

5. After epithelial cell lysis, centrifuge 5 min at 12 000 rpm.
6. Remove the spin basket containing the sample and place it in a new 2mL microtube.
7. Perform epithelial DNA extraction with **400µl of supernatant (epithelial fraction)**. Refer to Crime Prep Adem-Kit Instruction (start the protocol at the “Binding genomic DNA” step).

2. Spermatozoid cells lysis


1. Perform sperm lysis and DNA extraction on the sample in the first spin basket, using the Crime Prep Adem-kit. See Crime Prep Adem-Kit instructions.

Warranty

This product is only for use in research. The purchaser is responsible to validate the performance of this product for any particular use, and to use the product in compliance with any applicable regulations. The products are warranted to the original purchaser only to conform to the quality and contents stated on the vial and outer labels for duration of the stated shelf life. Ademtech's obligation and the purchaser's exclusive remedy under this warranty is limited either to replacement, at Ademtech's expense, of any products which shall be defective in manufacture, and which shall be returned to Ademtech, transportation prepaid, or at Ademtech's option, refund of the purchase price. Claims for merchandise damaged in transit must be submitted to the carrier.

Symbols

 **Reference Number**

 **Symbol for batch code/lot number.**
The symbol is accompanied by the manufacturer's batch code

 **Manufacturer**

This symbol is accompanied by the name and address of the manufacturer.

 **Expiration Date**

This symbol is accompanied by a date to indicate that the device should not be used after the end of the year, month or day shown.

 **Sufficient For**

The number of items for which the contents of the pack is sufficient appears adjacent to the symbol.

 **Temperature Limitation / Temperature Range**

Symbol for temperature limitation or temperature range. Both upper and lower limits are indicated adjacent to horizontal lines.

Ordering Information

- **Ademtech Kits**

N°.	PRODUCT	PACKAGE SIZE
06211	Crime Prep Adem-Kit	10 x 96
06213	Crime Prep Adem-Kit	1 x 96
06212	Crime Prep Adem-Kit AutoMag Solution (prefilled reagents plates)	48 (4x12)
06140	Smart D-N-Adem-Kit for Profiling	1 x 100
10811	Bone Lysis Buffer	48

- **Instrument and consumables**

N°.	PRODUCT	PACKAGE SIZE
20105	Adem-Mag MODULO Classic	1 Unit
20106	Adem-Mag 96	1 Unit
20108	Adem-Mag MODULO Brick	1 Unit
21101	AutoMag instrument	1 Unit
21102	Microtiter Deepwell 96 plate	50 Units
21103	12-tip com for 96 Deepwell plate	50 Units
21104	Elution Strip	40 Units
12102	Forensic Filters	250 Units