

User Developed Protocols for  
Forensic Applications

QuickGene-810  
and  
QuickGene DNA tissue kit S

DNA Source: blood stains, saliva stains  
buccal swabs  
cigarette stub  
hair roots  
chewing gum  
stamps and envelopes  
sperm stains

## DNA isolation from blood stains, saliva stains (except sperm)

Material containing stain cut into pieces in a 1.5ml reaction tube

↓  
Add 180µl MDT  
Add 20µl EDT  
Add 180µl LDT

Mix thoroughly by vortexing

↓  
Incubate for 1h at 55°C

Flash spin down

↓  
Add 240µl >99% EtOH

Mix thoroughly by vortexing, flash spin down

↓  
Transfer supernatant into cartridge

Select "DNA tissue" mode (elution volume 100µl)

Press [START]

## DNA isolation from buccal swabs

Swab in a 1.5ml reaction tube



Add 180 $\mu$ l MDT

Add 20 $\mu$ l EDT

Add 180 $\mu$ l LDT

Mix thoroughly by vortexing



Incubate for 20min at 55°C

Flash spin down



Add 240 $\mu$ l >99% EtOH

Mix thoroughly by vortexing, flash spin down  
squeeze out the swab on the tube wall, discard swab



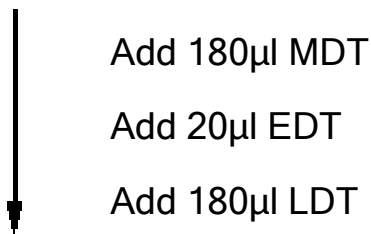
Transfer supernatant into cartridge

Select "DNA tissue" mode (elution volume 100 $\mu$ l)

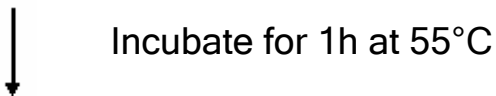
Press [START]

## DNA isolation from cigarette stub

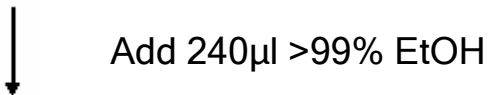
A small piece (~5 mm) of paper or cigarette filter  
in a 1.5ml reaction tube



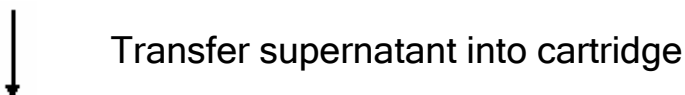
Mix thoroughly by vortexing



Flash spin down



Mix thoroughly by vortexing, flash spin down  
squeeze out the swab on the tube wall, discard swab



Select "DNA tissue" mode (elution volume 100 $\mu$ l)

Press [START]

## DNA isolation from hair roots

One or more hair roots in a 1.5ml reaction tube



Add 180 $\mu$ l MDT

Add 30 $\mu$ l 1M DTT (1M Dithiotreitol)

Add 20 $\mu$ l EDT

Add 180 $\mu$ l LDT

Mix thoroughly by vortexing



Incubate for 1h at 55°C

Flash spin down



Add 240 $\mu$ l >99% EtOH

Mix thoroughly by vortexing, flash spin down  
squeeze out the swab on the tube wall, discard swab



Transfer supernatant into cartridge

Select "DNA tissue" mode (elution volume 100 $\mu$ l)

Press [START]

## DNA isolation from chewing gum

A small piece of chewing gum cut into small pieces  
in a 1.5ml reaction tube

↓  
Add 180 $\mu$ l MDT  
Add 20 $\mu$ l EDT  
Add 180 $\mu$ l LDT

Mix thoroughly by vortexing

↓  
Incubate for 3h at 55°C

Flash spin down

↓  
Add 240 $\mu$ l >99% EtOH

Mix thoroughly by vortexing, flash spin down  
squeeze out the swab on the tube wall, discard swab

↓  
Transfer supernatant into cartridge

Select "DNA tissue" mode (elution volume 100 $\mu$ l)

Press [START]

## DNA isolation from stamps and envelopes

A piece of envelope / stamp cut into small pieces  
in a 1.5ml reaction tube

↓  
Add 180µl MDT  
Add 20µl EDT  
Add 180µl LDT

Mix thoroughly by vortexing

↓  
Incubate for 1h at 55°C

Flash spin down

↓  
Add 240µl >99% EtOH

Mix thoroughly by vortexing, flash spin down  
squeeze out the swab on the tube wall, discard swab

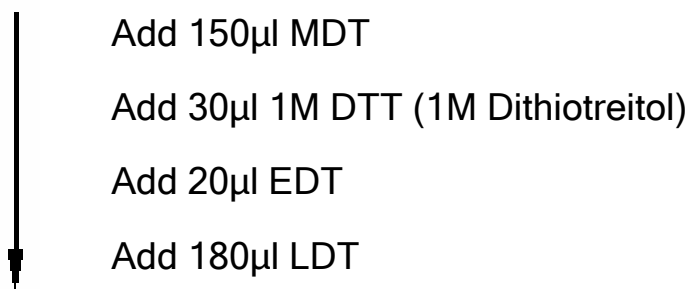
↓  
Transfer supernatant into cartridge

Select "DNA tissue" mode (elution volume 100µl)

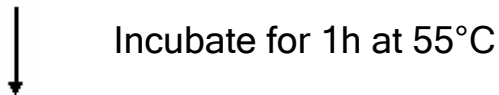
Press [START]

## DNA isolation from sperm stains

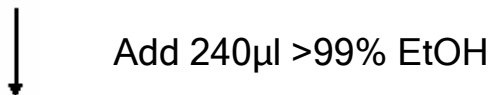
Material containing stain cut into pieces in a 1.5ml reaction tube



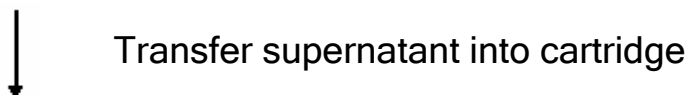
Mix thoroughly by vortexing



Flash spin down



Mix thoroughly by vortexing, flash spin down



Select "DNA tissue" mode (elution volume 100 $\mu$ l)

Press [START]