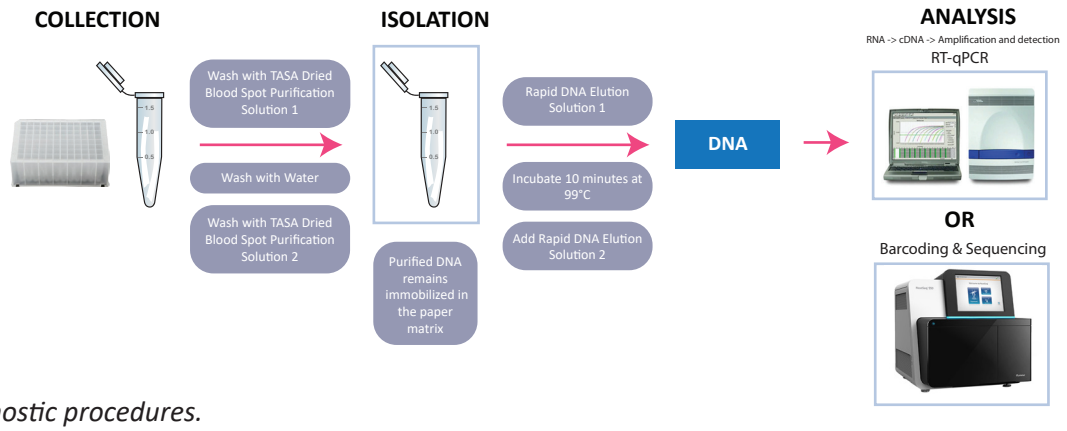
TASA SCIENCE

PROTOCOL

DNA Purification Protocol Using FastEx DNA Dried Blood Spot Kit

This protocol is designed to optimize both yield and quality DNA from blood and plant tissue samples applied to chemically treated filter paper, including GenSaver 2.0, Non-Indicating FTA, and QIAcard FTA Gene cards that enable various molecular downstream applications including Real-time qRT-PCR and NGS. TASA DNA FastEx Dried Saliva Spot Kit provides a rapid method for isolating and purifying DNA, including genomic DNA, HBV, HPV, etc.

For research use only. Not for use in diagnostic procedures.



DNA Purification

1. Punch 4-6 disks (6mm diameter punched disks) or cut 1-2 strips (2.0cm x 0.6cm strips) from the Sample Collection Card and place them into a 1.5ml microtube.
2. Add 1.0mL of **TASA Dried Blood Spot Purification Solution 1** and vortex gently several times for approximately 10 minutes. Pipette the TASA Dried Saliva Spot Purification Solution 1 up and down to further mix, then remove as much solution as possible.
   Repeat this wash step three more times for a total of four times (40 minutes total).
3. To wash, add 1.0mL of Nuclease-free Water and vortex gently several times for approximately 2 minutes. Discard the water completely. Repeat this washing step one more time.
4. Add 0.4 ml of **TASA Dried Blood Spot Purification Solution 2** and vortex gently multiple times for over 2 minutes, then completely remove solution and discard solution.

DNA Elution

Method 1

5. Add 60-80µl of **TASA Rapid DNA Elution Solution 1**.
6. Set the heat block to 99°C. Incubate for 10 minutes to release the DNA. Centrifuge briefly.
7. Add 6-8µl of **TASA Rapid DNA Elution Solution 2**.
8. Recover the DNA by pressing the punches or strips to the bottom of tube with 200µl pre-cut pipette tips. DNA is ready for use.

Note: Repeat steps 5-8 multiple times to obtain more DNA if necessary (optional).

Method 2

5. Transfer the punches or strips into a 0.2ml PCR tube.
6. Set the thermocycler to 99°C. Incubate the punches or strips with 60-80µl of **TASA Rapid DNA Elution Solution 1** for 10 minutes to release the DNA.
7. Add 6-8µl of **TASA Rapid DNA Elution Solution 2** into a PCR tube.
8. Recover the DNA by pressing the punches or strips to the bottom of PCR tube with 200µl pre-cut pipette tips. DNA is ready for use.

Note: Repeat steps 6-8 multiple times to obtain more DNA if necessary (optional).

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