



## YTA-Blood DNA Extraction mini Kit

Cat No : YT9021

Size: 50 preps

<<for research use only>>

Kit Contents	50 preps
BG Buffer	15 ml
Proteinase K 20mg	1 vial
Proteinase K stock buffer 1 ml	1 vial
BW1 Buffer * (concentrate)	22 ml
BW2 Buffer ** (concentrate)	15 ml
Elution Buffer	15 ml
Mini Column & collection tube	50 sets
Elution tube	50 PCS

**Materials be supplied by the users :**

Ethanol (96–100%)

**Preparation note:**

**Add 5.5 ml ethanol (96-100%) to BW1**

**Add 35 ml ethanol (96-100%) to BW2**

**Add 1ml Proteinase K stock buffer to proteinase K**

**Powder , mix by vortex and keep it at -20°C**

**General Protocol:**

HINT: Prepare a dry bath or water bath to 60 °C bath for step 4. Preheat Elution Buffer to 65 °C for step 13 (Elution step).

Please Read Important Notes Before Starting the Following Steps.

1. Transfer up to 200 µl sample ( whole blood, serum, plasma, body fluids, buffy coat) to a microcentrifuge tube (not provided).  
- If the sample volume is less than 200 µl , add the appropriate volume of PBS.
2. (Optional): If RNA-free genomic DNA is required, add 4 µl of 100 mg/ml RNase A to the sample and incubate for 2 min at room temperature.
3. Add 20 µl Proteinase K and 200 µl BG Buffer to the sample. Mix thoroughly by pulse-vortexing.  
- Do not add Proteinase K directly to BG Buffer.
4. Incubate at 60 °C for 15 minutes to lyse the sample. During incubation, vortex the sample every 3-5 minutes.
5. Briefly spin the tube to remove drops from the inside of the lid.
6. Add 200 µl ethanol (96- 100 %) to the sample. Mix thoroughly by pulse-vortexing for 10 sec.
7. Briefly spin the tube to remove drops from the inside of the lid.
8. Place a Mini Column to a Collection Tube. Transfer the mixture (including any precipitate) carefully to the Mini Column. Centrifuge at 6,000 x g for 1 min then discard flow-through.
9. Add 400 µl BW1 Buffer to the Mini Column and centrifuge at full speed for 30 sec then discard the flow-through.  
- Make sure that ethanol has been added into BW1 Buffer when first open.
10. Add 750 µl BW2 Buffer to the Mini Column and centrifuge at full speed for 30 sec then discard the flow-through.- Make sure that ethanol has been added into BW2 Buffer when first open.
11. Centrifuge at full speed for an additional 3 minutes to dry the column.  
Important Step! This step will avoid the residual liquid to inhibit subsequent enzymatic reaction.
12. Place the Mini Column to an Elution Tube.
13. Add 50 ~ 200 µl of heated Elution Buffer or ddH<sub>2</sub>O (pH 7.5- 9.0) to the membrane center of Mini Column. Stand Mini Column for 3 minutes.- Important Step! For effective elution, make sure that the elution solution is dispensed onto the membrane center and is absorbed completely.
14. Centrifuge at full speed for 1 minutes to elute total DNA.
15. Store total DNA at 4 °C or -20 °C.

Technical whatsapp : +989038623150

Order whatsapp: +989371095037

Office : 021 - 40777399