TIARIS

High-Q™ Tissue Genomic DNA Purification Midi Kit

(for processing 50-100 mg tissue)

Ordering info

TBK0158, 20 reactions

TBK0159, 50 reactions

Description

High-Q™ Tissue Genomic DNA Purification Mini Kit is an optimized kit to obtain high molecular weight genomic DNA from fresh or frozen. The kit is based on salting-out principle to produce higher quantity and quality of DNA.

Features

- **High yield and purity,** 150-500 µg gDNA/ 100 mg sample, A260/A280 ~1.8.
- Scalable, easily to process many samples simultaneously.
- No phenol extraction.
- Fast and easy protocol.
- Cost-effective.

Applications

DNA obtained is suitable for downstream molecular biology applications such as PCR, enzymatic digestion for cloning or Southern, genotyping, etc.

Quality Control

DNA isolation from 10 mg tissue is checked by: integrity (agarose gel electrophoresis), quantity and quality (A260/280= 1.8 ± 0.2).

Kit Components

Components	TBK0158	TBK0159
BT2 Buffer	65 mL	160 mL
BT3 Buffer	25 mL	60 mL
RNAse A (10 mg/mL)	350 µL	800 µL
Proteinase K *	2x30 mg	5x30 mg
Elution Buffer	15 mL	45 mL

Order Info Kit Components: BT2 Buffer (TBB0520) | BT3 Buffer (TBB0521) | RNAse A (TBZ0315) | Proteinase K (TBZ0305, TBZ0308) | Elution Buffer (TBB0510).

* To prepare a 20 mg/mL solution add 1.5 mL Water (*Molecular Biology Grade*) to 30 mg Proteinase K powder. Store Proteinase K solution in aliquots at -20°C.

Storage

Store the kit at 25°C.

Store Proteinase K and RNAse A at -20°C.

Material required (not supplied)

- Isopropyl Alcohol (CAS 67-63-0).
- Ethanol 70%.
- Tubes (1.5 mL, 15 mL).

www.tiarisbiosciences.com

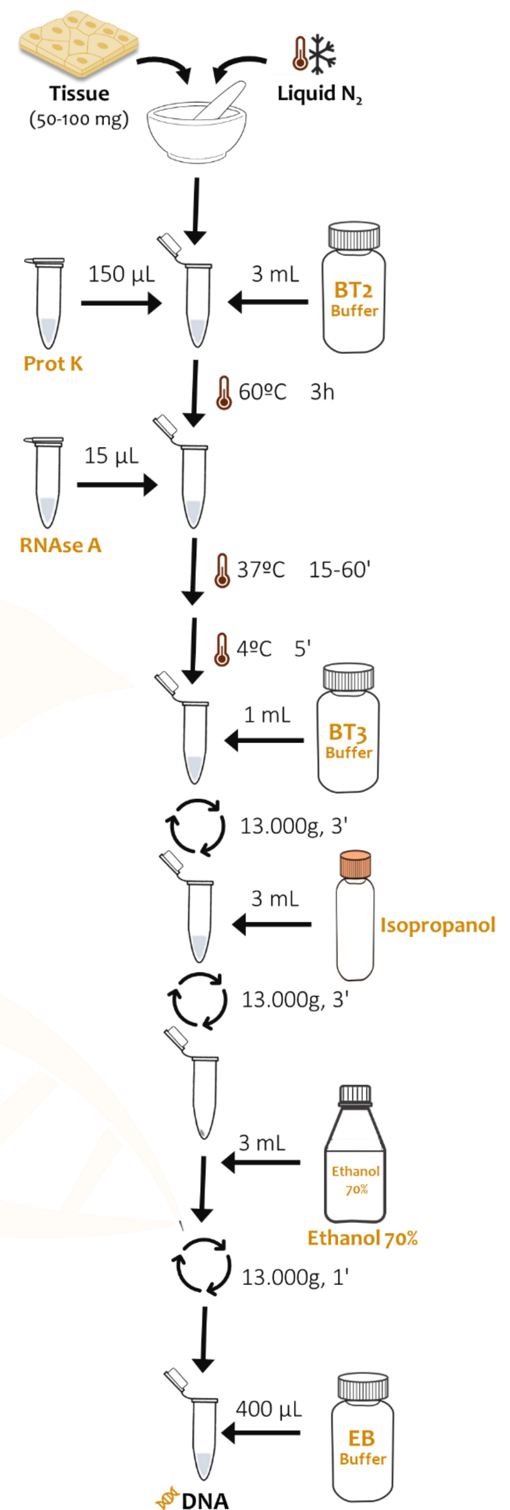
© TIARIS Biosciences, 2022

www.tiarisbiosciences.com

PROTOCOL

1. Using liquid nitrogen, grind **50-100 mg tissue** finely with a pestle in a mortar.
2. With a spatula frozen with liquid nitrogen, transfer ground tissue to 15 mL tube. Put it on ice.
3. Add **150 µL Proteinase K** and **3 mL BT2 Buffer** and mix with a pipette.
4. Incubate at 60 °C, 3 hours
5. Add **15 µL RNAse A** and mix with a pipette and mix by inversion (~ 30 times).
6. Incubate at 37 °C, for 15-60 minutes.
7. Cool the sample 5 minutes on ice.
8. Add **1 mL BT3 Buffer** and mix vigorously by vortex.
9. Centrifuge at 2.000 g, 10 minutes.
10. Recover the supernatant into a 15 mL tube containing **3 mL Isopropanol**. Mix by inversion (~ 50 times).
11. Centrifuge at 2.000 g, 3 minutes.
12. Discard the supernatant and add **3 mL Ethanol 70%**.
13. Centrifuge at 2.000g for 2 minutes and discard the supernatant using a pipette.
14. Invert and dry the tube on paper towels for 5-10 minutes.

    The DNA will be visible as a small white pellet.
15. Add **400 µL Elution Buffer** to resuspend the DNA.
16. Check integrity on agarose electrophoresis and quantity and quality by spectrophotometry.
17. Store at -20°C.



© TIARIS Biosciences, 2022