

DA-b-8

Automated Genomic DNA Extraction from Liver of Mouse

Protocol

2 ml micro tube

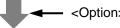
Slice of mouse liver : 5 mgMDT : 180 μlEDT : 20 μl

Incubate for over night on rotary shaker at 55°C, and dissolve the tissue completely



10,000 rpm, 3 min, RT

Transfer the supernatant to a 2 ml micro tube *1, *2



<Option> RNase A treatment *3

Set into the device

Protocol: DNA TISSUE (Elution volume : 200 µl *4)

*Please refer to Quick Start Guide or operation manual to know how to set sample tube.

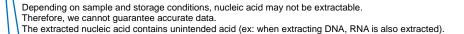
- 1. Pre-heating for 3 min
- 2. Add 180 µl of Lysis Buffer (LDT)
- 3. Mix by pipetting
- 4. Incubation at 60°C for 5 min
- 5. Transfer the lysate and mix with 240 μ l of Ethanol(>99%).

- 6. Mix by pipetting
- 7. Apply the lysate into the cartridge
- 8. Pressurizing
- 9. Wash 3 times by Wash Buffer (WDT)
- Add selected volume of Elution buffer and elute genomic DNA into collection tube.

Genomic DNA

- *1 Following microtube are recommended. #BM4020 (BM instrument co., ltd) #72.695.700, #72.695.500S (SARSTEDT)
- *2 Remove unlysed portions by centrifugation.
- *3 Optional steps RNaseA: 20 µl Tap the tube to mix the solution. Flash spin down. Set it down at room temperature for 2 min.
- *4 For example, from 5 mg liver tissue of Balb/c mouse (7 week, ♀), 4.0 μg genomic DNA can be gained.

 The default volume of CDT is 200 μl. The volume of CDT can be reduced to 50 μl, but in that case, elution efficiency might be decreased.







Results

The yield of genomic DNA

Sample ID	#1	#2	#3	#4	Average	S.D.
Yield (μg)	7.1	6.9	9.3	8.1	7.9	1.01

Protein contamination: A260/280

Sample ID	#1	#2	#3	#4	Average
A260/280	1.92	1.90	1.92	1.99	1.93

Chaotropic salt contamination: A260/230

Sample ID	#1	#2	#3	#4	Average
A260/230	2.17	2.02	2.08	2.20	2.12

Common protocol is usable for the following

Mouse Lung, Mouse Kidney

