Chapter 3-XIV

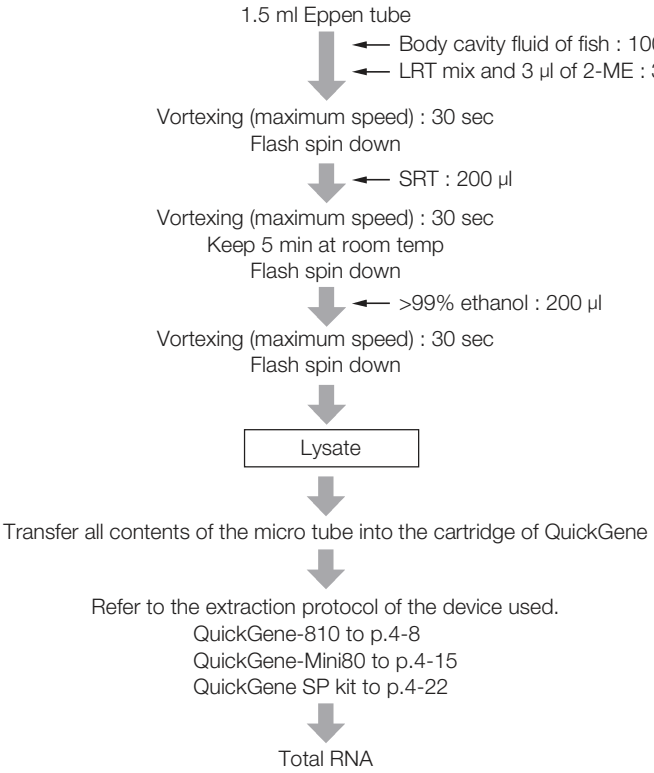
Total RNA Extraction from Fish and Clam

RD-1

QuickGene RNA tissue kit S Ⅱ (RT-S2)
QuickGene SP kit RNA tissue (SP-RT)

Total RNA Extraction from Body Cavity Fluid of Fish

Protocol



*1 In case freezing and melting was repeated, centrifuge at 6,800×g for 3 min and collect supernatant.
*2 LRT mix : Dissolve 310 mg of Carrier RNA with 11.6 ml of LRT

Results

Electropherogram

No Data

The yield of total RNA

No Data

Protein contamination : A260/280

Amount of body cavity fluid	A260/280
100 µl	1.6

Chaotropic salt contamination : A260/230

No Data

Other

No Data

Common protocol is usable for the following

No Data

QuickGene RNA tissue kit S Ⅱ (RT-S2)
QuickGene SP kit RNA tissue (SP-RT)

Total RNA Extraction from Fin of Killifish

Protocol

1.5 ml micro tube
← LRT (2-ME added) *1 : 400 µl
← Killifish fin : 1 piece (stored RNAlater)
↓
Homogenize : Pass the lysate 15 times *2
↓
Mix by vortexing for 15 sec. (maximum rotation speed)
↓
15,000 rpm, 3 min, 10°C
↓
Mix by vortexing for 15 sec. (maximum rotation speed)
↓
15,000 rpm, 3 min, 10°C
↓
Transfer the supernatant (350 µl) to a new 1.5 ml Eppendorf tube *3
← SRT : 175 µl
↓
Mix by vortexing for 15 sec. (maximum rotation speed)
Flash spin down (several seconds)
← > 99 % ethanol : 175 µl
↓
Mix by vortexing for 1 min. (maximum rotation speed)
Flash spin down (several seconds)
↓
Lysate
↓
Transfer all contents of the micro tube into the cartridge of QuickGene
↓
Refer to the extraction protocol of the device used.
QuickGene-810 to p.4-8
QuickGene-Mini80 to p.4-15
QuickGene SP kit to p.4-22
↓
Total RNA (Elution volume : 50 µl)

*1 Add 10 µl of 2-ME per 1 ml of LRT.

*2 Until particles of tissue becomes invisible

*3 Take care not to suck the precipitate

Results

Electropherogram

No Data

The yield of total RNA

Amount of fin	Yield(µg)
1 piece	2.0

Protein contamination : A260/280

No Data

Chaotropic salt contamination : A260/230

No Data

Other

No Data

Common protocol is usable for the following

Killifish Liver

RD-3

QuickGene RNA tissue kit S Ⅱ (RT-S2)
QuickGene SP kit RNA tissue (SP-RT)

Total RNA Extraction from Liver of Killifish

Protocol

1.5 ml micro tube
← LRT (2-ME added) *1 : 400 µl
← Killifish liver : 1 piece (stored RNAlater)
Homogenize : Pass the lysate 15 times *2
Mix by vortexing for 15 sec. (maximum rotation speed)
15,000 rpm, 3 min, 10°C
Mix by vortexing for 15 sec. (maximum rotation speed)
15,000 rpm, 3 min, 10°C
Transfer the supernatant (350 µl) to a new 1.5 ml Eppendorf tube *3
← SRT : 175 µl
Mix by vortexing for 15 sec. (maximum rotation speed)
Flash spin down (several seconds)
← > 99 % ethanol : 175 µl
Mix by vortexing for 1 min. (maximum rotation speed)
Flash spin down (several seconds)
Lysate
Transfer all contents of the micro tube into the cartridge of QuickGene
Refer to the extraction protocol of the device used.
QuickGene-810 to p.4-8
QuickGene-Mini80 to p.4-15
QuickGene SP kit to p.4-22
Total RNA (Elution volume : 50 µl)

*1 Add 10 µl of 2-ME per 1 ml of LRT.

*2 Until particles of tissue becomes invisible

*3 Take care not to suck the precipitate

Results

Electropherogram

No Data

The yield of total RNA

Amount of liver	Yield(µg)
1 piece	about 20.0

Protein contamination : A260/280

Amount of liver	A260/280
1 piece	2.1

Chaotropic salt contamination : A260/230

No Data

Other

No Data

Common protocol is usable for the following

Killifish fin

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