

Total RNA extraction with RNeasy (QIAGEN)

0) Add 10 μ L of β -ME to RLT (per 1 mL)

Add 44 mL of EtOH to conc. RPE

Set Dry-bath temp. at 56 °C

1) Measure material amount (< 100 mg)

2) Add 200 μ L of RLT

3) Grind thoroughly with Hand-homogenizer

4) Add 250 μ L of RLT

5) Vortex vigorously

6) Keep 4°C

7) Incubate 56 °C, 2 min

8) Transfer lysate to QIA shredder Spin Column (lilac)

9) Cfg. 2 min at max speed

10) Take sup and pour to new 2.0 mL tube

11) Add 225 μ L of EtOH and mix immediately with pipette

12) Apply all sample to RNeasy Mini Column (pink)

13) Cfg. 15 sec at 10000 rpm

14) Discard the flow-through

15) Add 700 μ L of RW1 to RNeasy column

16) Cfg. 15 sec at 10000 rpm

17) Discard the flow-through

18) Transfer RNeasy column to new 2.0 mL tube

19) Add 500 μ L of RPE onto RNeasy column

20) Cfg. 15 sec at 10000 rpm

21) Discard the flow-through

22) Add another 500 μ L of RPE onto RNeasy column

23) Cfg. 2 min at 10000 rpm to dry up

24) Transfer RNeasy column to new 1.5 mL tube

25) Cfg. 1 min at max speed

26) Transfer RNeasy column to new 1.5 mL tube

27) Add 30 μ L RNase-free water onto RNeasy column

28) Cfg. 1 min at 10000 rpm

29) Repeat 26)-27) with first-elute

30) Measure RNA amount with NanoDrop

31) Keep -80 °C