User guide of RNA cartridge (R1)

Notification:

Please clean up all gears and avoid the contamination of RNase.

The **DEPC-water** is used in this process for RNA analysis.

1. **Buffer preparation:**

   Separation buffer (1X): 10X Separation buffer stock(Cat. No.C104409-10X), **DEPC-water** as diluent.

   Dilution buffer (1X): 10X Dilution buffer stock (Cat. No. C104408-10X), **DEPC-water** as diluent.

   * **DEPC-water** needs to be filled in the **Park/Wash/Clean wells of buffer tray**

2. **Lower Marker preparation**

   Step 1. add 20µl of dilution buffer (1X) into an RNase-free PCR tube

   Step 2. add 5ul of 5X RNA Lower Marker into the tube and mix it.

3. **Sample preparation (Total RNA):**

   Sample dilution:

   Use dilution buffer (1X) to adjust the RNA sample between 5 ~ 100 ng/µl (Total RNA) and aliquot 20µl sample in 200µl RNase-free tube.

   Sample treatment:

   Heat the sample at 95℃ for 5 minutes, and immediately put on ice at least 5 minutes until analysis

4. **Sample analysis:**

   Step 1. Place the (1 X) lower marker at MC1 position

   Step 2. Place the sample into instrument

   Step 3. Use the following method to test

Method	Description	Range	Remark
R-4-10-04-600	Sample injection 4kv 10s Separation 4kv 600s		Total RNA QC

* *Qsep100* should recognize the R1 cartridge and automatically lock the method for RNA application only.

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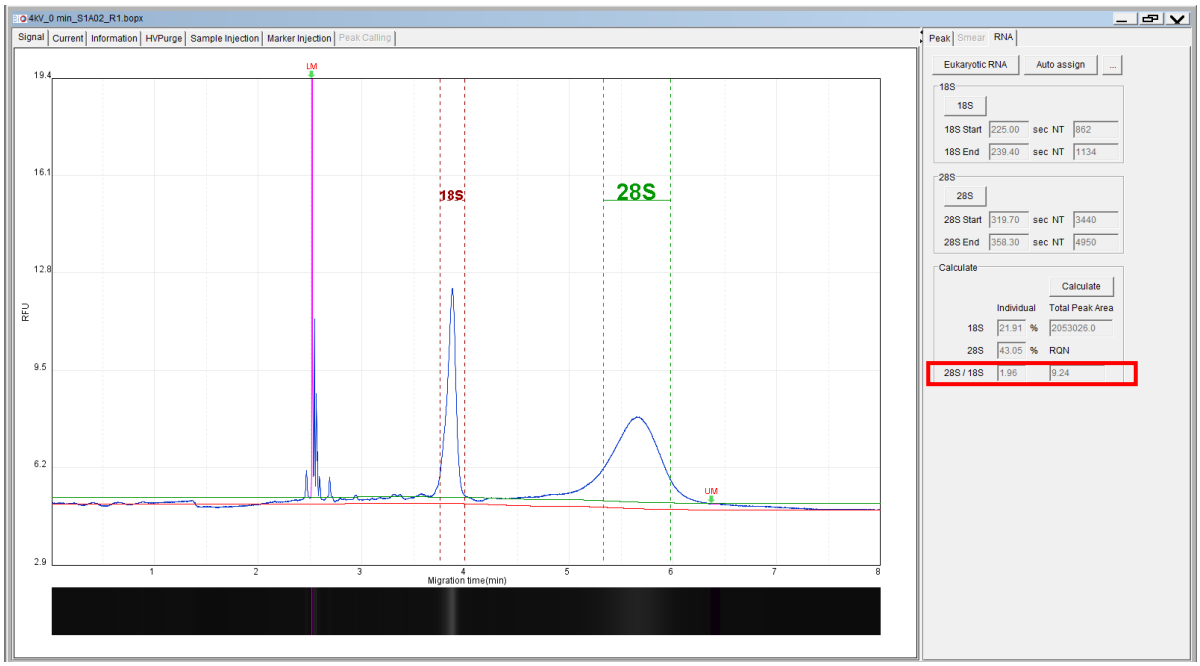
Data analysis:

RNA quality number (RQN) :

The software should identify lower marker, 18S and 28S automatically. If the software didn't assign this two regions, user can click "Auto assign" .



Check the data analysis firstly. If necessary, If necessary, please change parameters setting or manually assign to correct lower marker. Check the lower marker:

If the software can't assign lower marker correctly, user can manually assign the correct peak as lower marker at "Peak" tab.

1. 18S and 28S area adjustment:

The 18S and 28S region can be adjusted by dragging the red line and green line.