



# SUPPORT

Please contact with local distributors or  
(Service@bioptic.com.tw)

## Troubleshooting Steps

- 1 HV check failed
  - 1-a. Repeat HV check 2-3 times.
  - 1-b. Soak cartridge tip in hot water and purge cartridge at least 15-30 mins with purge station simultaneously.
  
- 2 Calibration failed
 

Check HV purge, sample injection and separation current respectively.

  - **Unstable current of sample injection:**  
Make sure 5x Lower Marker (C109120) was loaded  $\geq 20 \mu\text{l}$  in 0.2 ml PCR tube after 5x dilution and placed at MC1/ M position.
  - **Unstable current of HV purge or separation:**
    - 2-a. Repeat unpacking procedure (2) and make sure the pin has been pressed all the way in (puncturing the internal gel barrier).
    - 2-b. Follow " Troubleshooting 1-b" .

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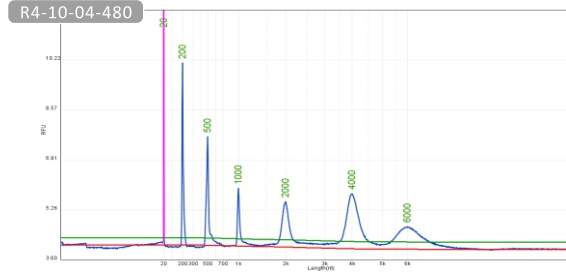


### Packing list for 1 pc/ 2 pcs/ 8 pcs cartridge kit

	RNA Cartridge Kit			Storage Condition
	1pc (C105110)	2pcs (C105210)	8pcs (C105810)	
RNA Cartridge (R1)	1 pc	2 pcs	8 pcs	15°C~27°C
5x Lower Marker (C109120)	100 $\mu\text{L}$ *1	100 $\mu\text{L}$ *2	100 $\mu\text{L}$ *8	-20°C
10X Separation Buffer	15 mL	15 mL	50 mL	4°C~27°C
10X Dilution Buffer	8 mL	8 mL	25 mL	
Mineral Oil	8 mL	8 mL	25 mL	
Accessory Package				
Buffer Tray	2 pcs	2 pcs	8 pcs	
PCR Vial	8 Strip *1			
Dropper	2 pcs	2 pcs	8 pcs	

\*Short-Term Storage ( $\leq 3$  months): 4°C ~ 27°C ; Long-Term Storage: -20°C

Analyzed result of RNA 6000 Ladder (Thermo Fisher) by R1 cartridge



#### Sample Preparation

Heat-denature RNA samples at 70°C for 2 minutes and put on ice at least 5 minutes.

※ Download the cartridge user guide from QR code or [link](#).



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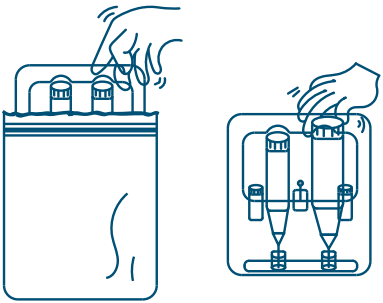
# RNA Cartridge



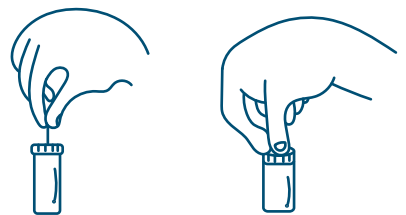
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Inc.

# Unpacking procedure

**1** Open the cartridge shell and take out cartridge vertically.



**2** Insert the pin into the small hole of cartridge cap and press it all the way in. Please repeat 2-3 times.

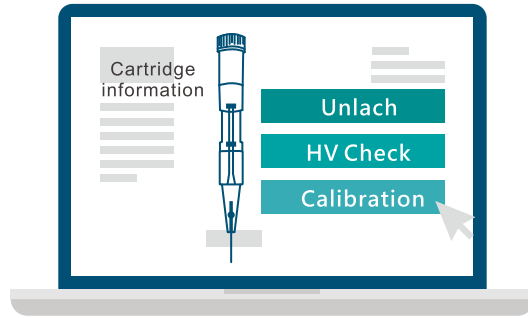


Recommendation: Repeat step 2 before use each time.

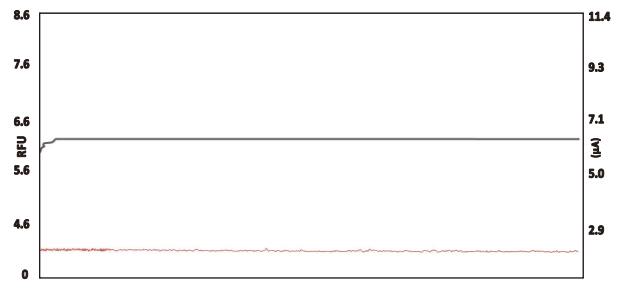
**3** Remove the pin and clean cartridge cap and tip with tissue. Make sure the cartridge is always kept in vertical position.



**4** Cartridge has to pass HV check and Calibration before use.

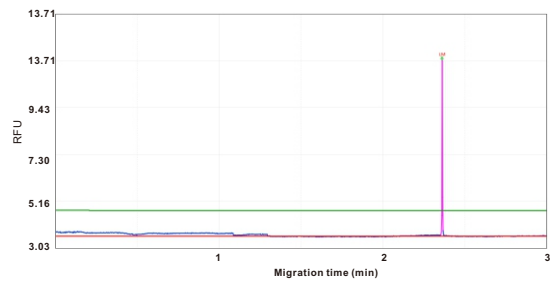


● HV Check: The current (gray line should be flat and >2 μA)



\*If the HV Check failed, please refer to troubleshooting (1).

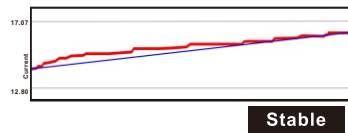
● Calibration: Place 5 times diluted 5x Lower Marker (C109120) at MC1/ M position.



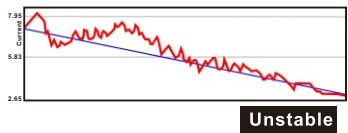
\*If the Calibration failed, please refer to troubleshooting (2).

Once the the calibration step is successful, check the HV purge, sample injection and separation current. If the current is unstable, please refer to troubleshooting **2**

### HV purge

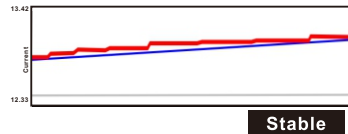


Stable

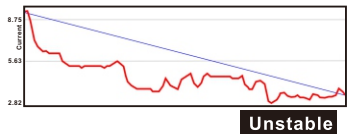


Unstable

### Sample Injection

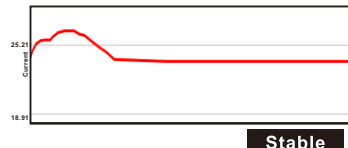


Stable

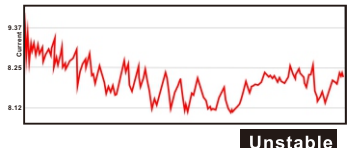


Unstable

### Separation



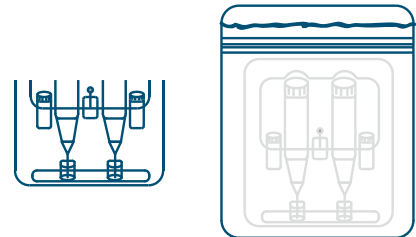
Stable



Unstable

### Packing Cartridges

Please inert cartridge back to cartridge shell and put cartridge shell into moisturizing bag after analysis.



\*Please ensure cartridge tip be inserted into protection gel