

# LCMS-8045

## 操作説明

Slam, SanKing Tech.,

# LCMS-8045 外觀



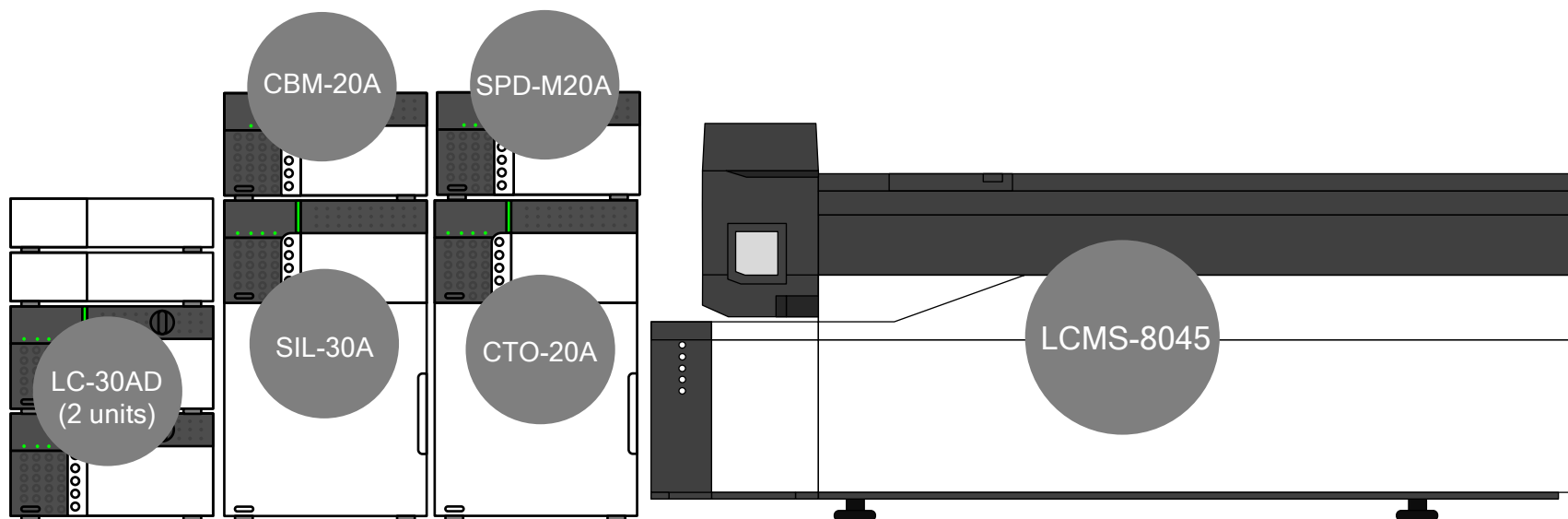
HPLC



LCMS-8045

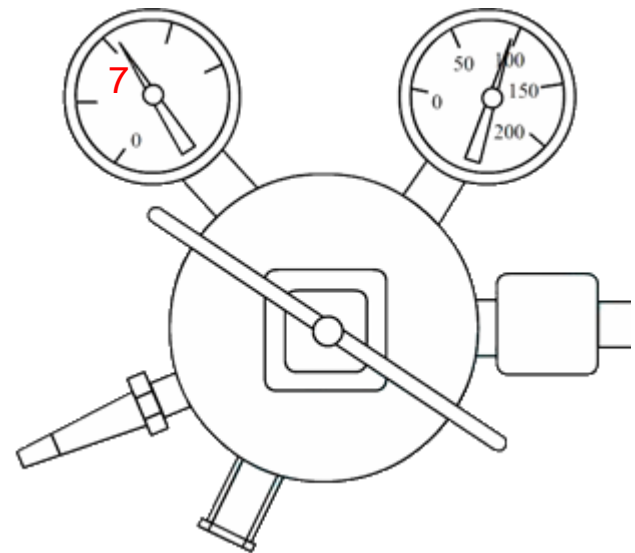
# LCMS-8045 組成

- Pump.....LC-30AD (x2)
- System Controller ....CBM-20A
- Autosampler.....SIL-30AC
- Column Oven.....CTO-20A
- Detector .....SPD-M20A
- MS Detector .....LCMS-8045



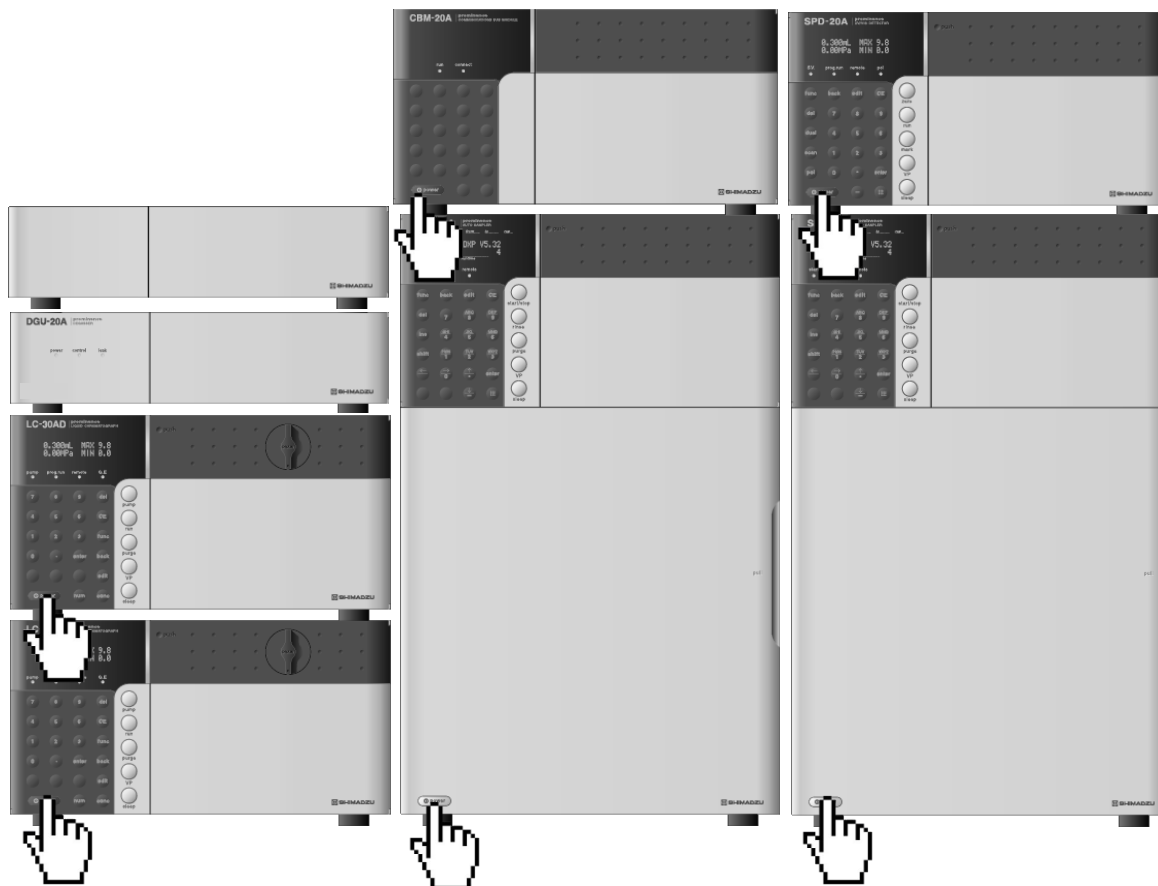
# 打開氣體供應開關

- 先確認氣體供應是否足夠後, 開啟氣體供應開關
- 氮氣外壓  $> 7 \text{ kg/cm}^2$
- 氬氣外壓  $> 5 \text{ kg/cm}^2$
- 空氣外壓  $> 7 \text{ kg/cm}^2$

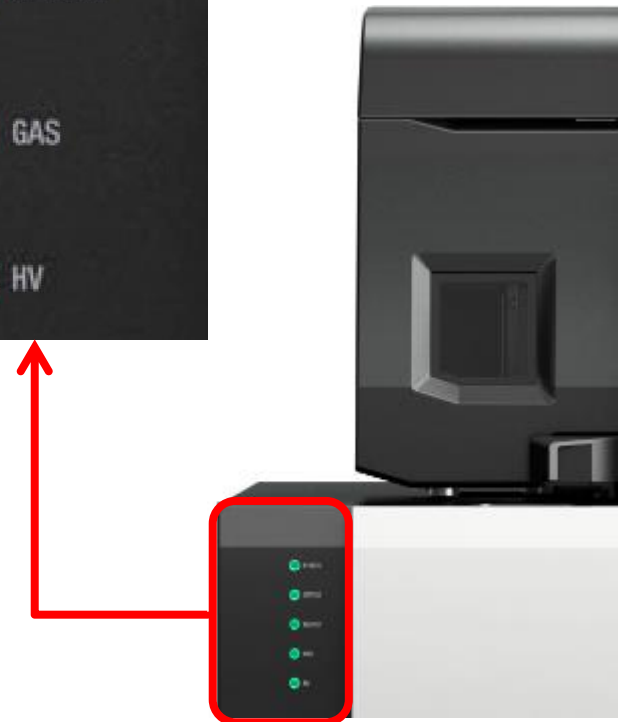
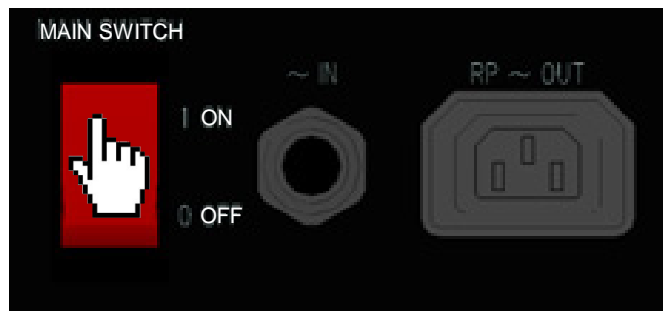
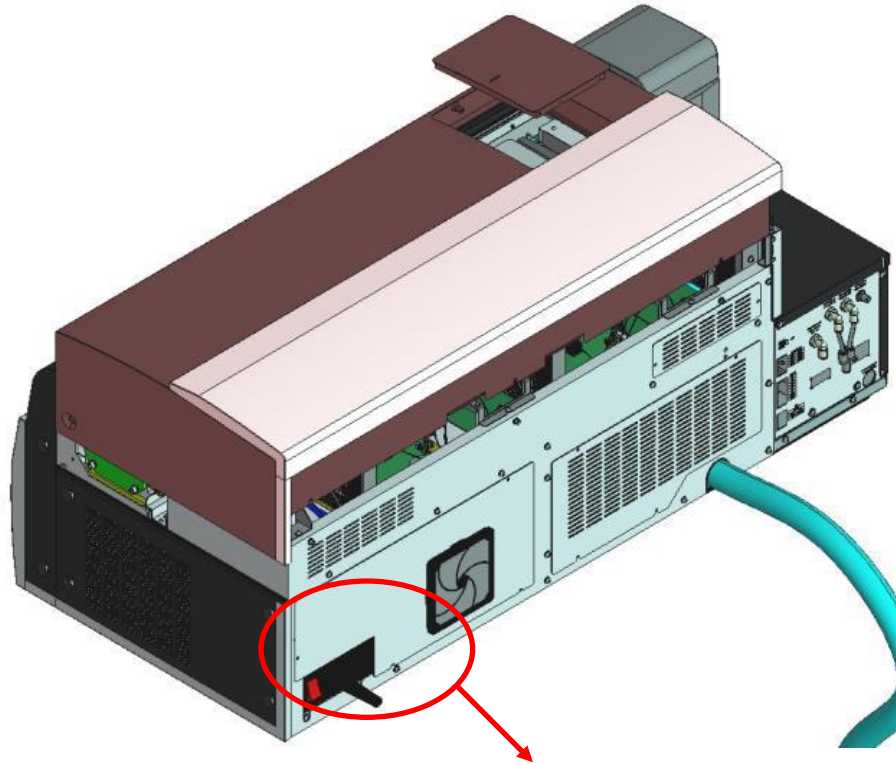


# LC 電源

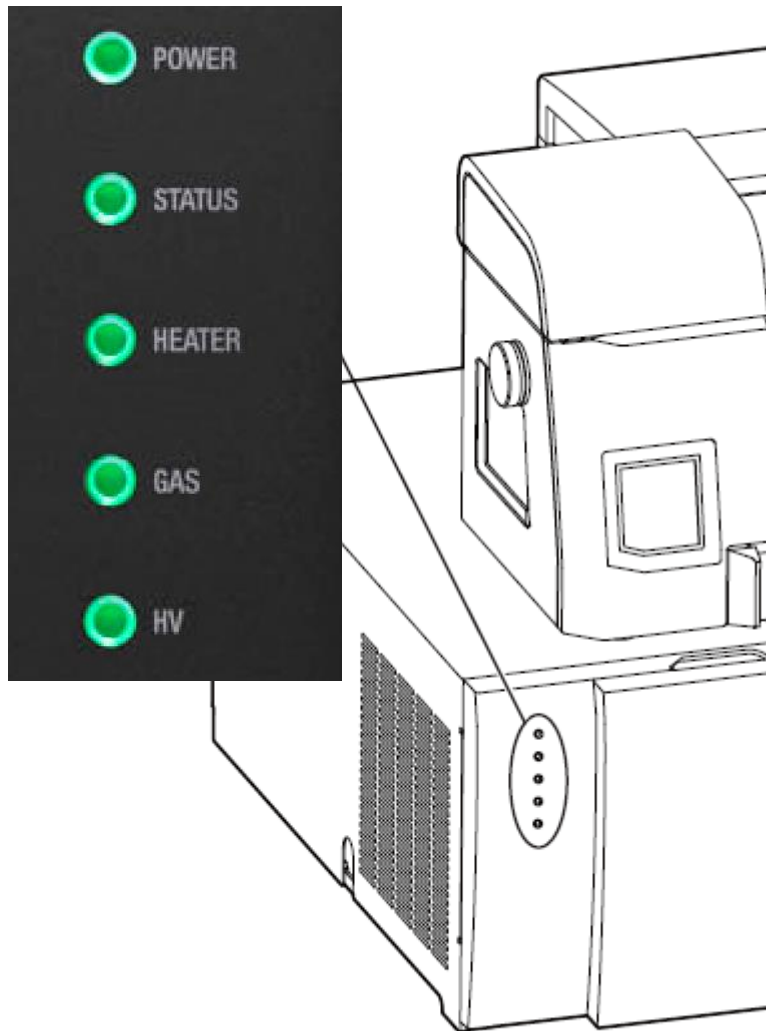
- 開啟LC 各項電源開關
- 最後開啟 CMB-20A (System Controller)



# MS 電源



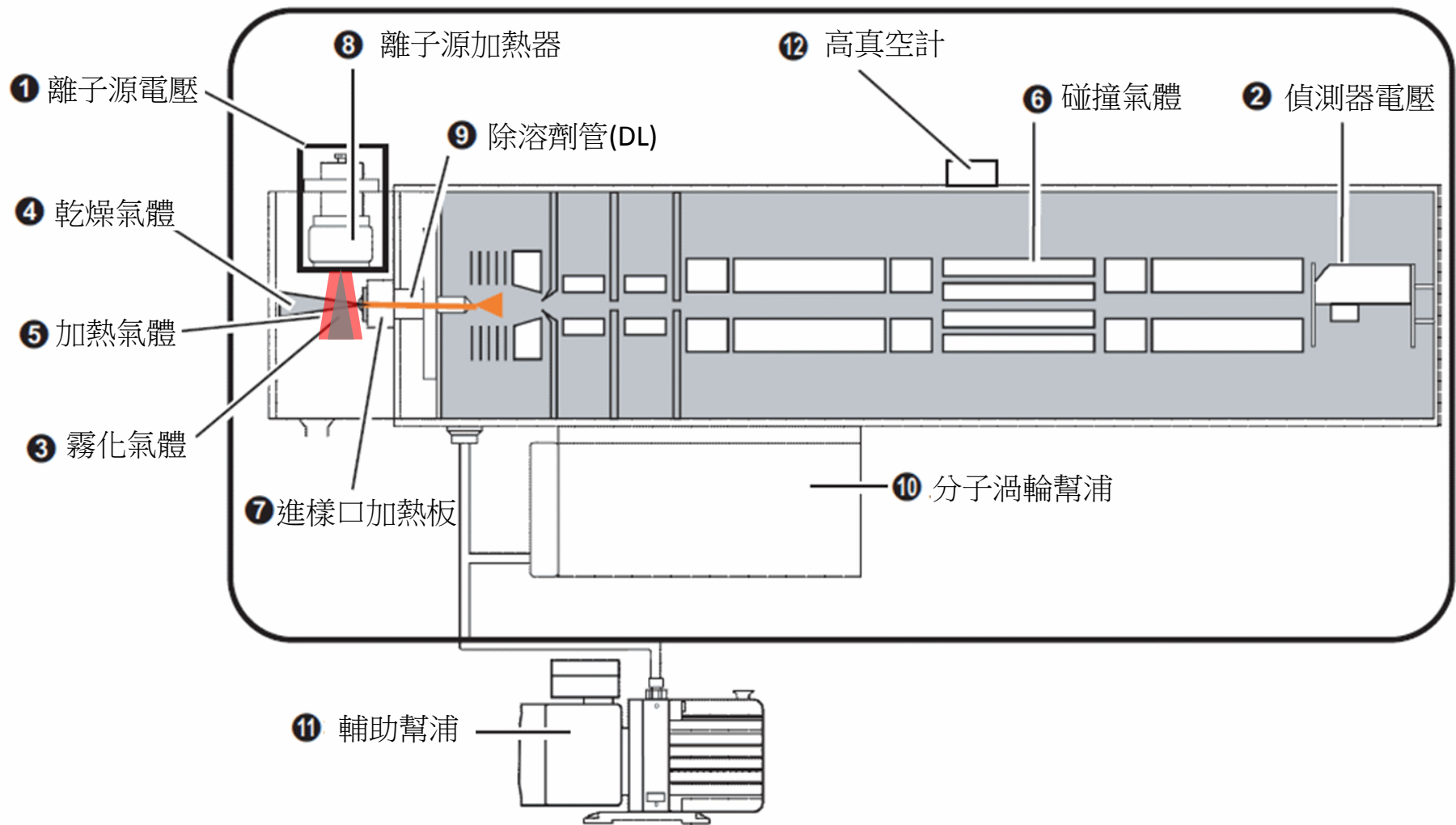
# LCMS-804 5燈號



POWER 儀器電源	電源供應器	
STATUS 真空狀態	⑩ 渦輪分子幫浦 ⑪ 輔助幫浦	綠燈閃爍:抽真空中 紅燈閃爍:固障
HEATER 加熱器	⑦ 進樣口加熱板 ⑧ 離子源加熱器 ⑨ 除溶劑管(DL)	
GAS 氣體供應	③ 霧化氣體 ④ 乾燥氣體 ⑤ 加熱氣體 ⑥ 碰撞氣體	閃爍 : N2 關, Ar 開
HV 高電壓	① 離子源電壓 ② 偵測器電壓	

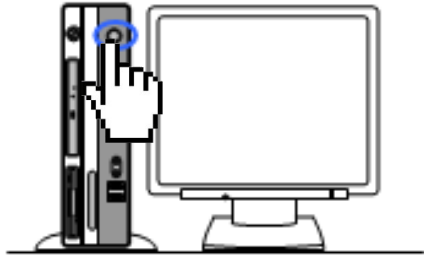
綠燈: 正常運作中

# 燈號指示部位



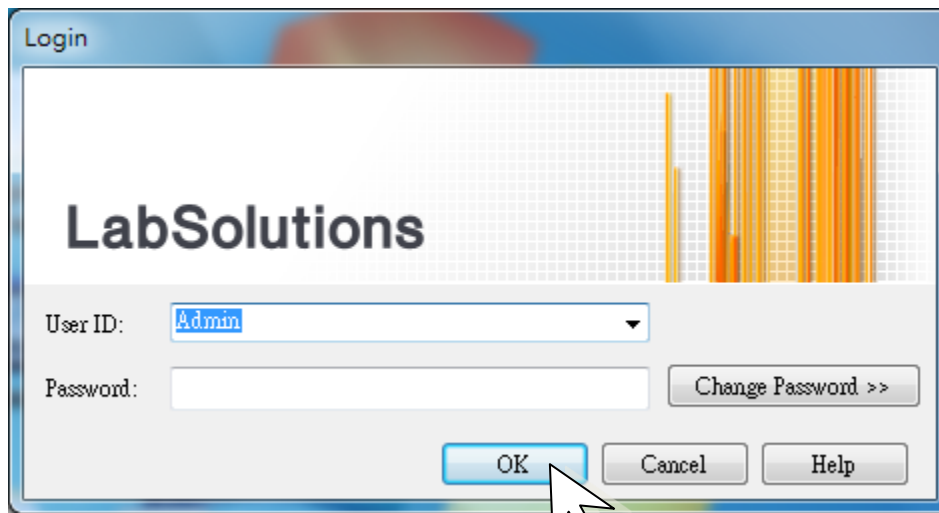


# 打開電腦, 點擊 Labsolutions



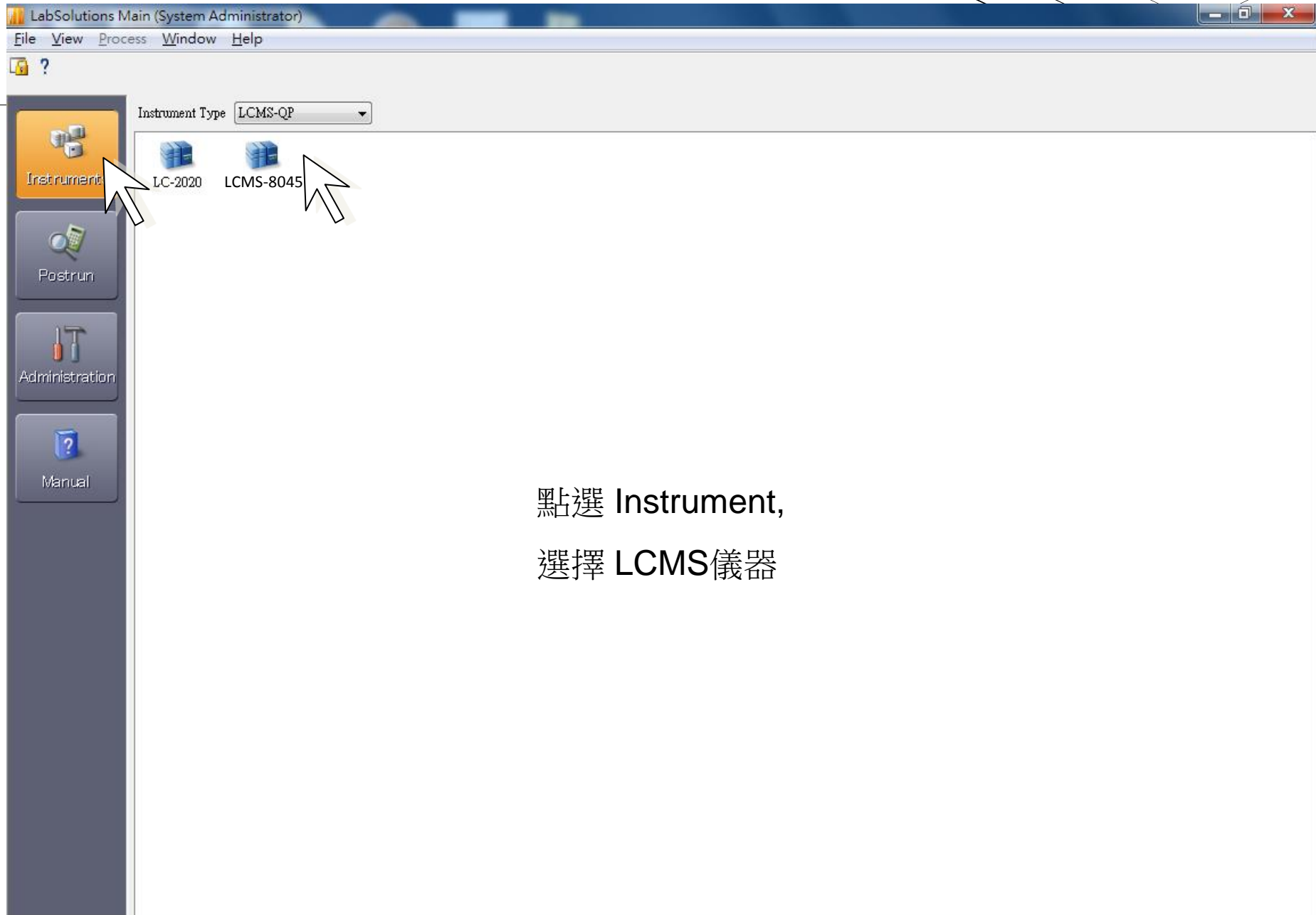
綠色	正常
黃色	啟動中
紅色	錯誤

# LabSolutions



User ID: Admin

不用輸入Password



點選 Instrument,  
選擇 LCMS儀器

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



主視窗

Main

System Configuration

System Check

Data Acquisition

Realtime Batch

Report Format

Calibration Curve

Batch Editor

Acquisition

**LCReady MS DEMO/Ready** Plot

Sample Name :  
Sample ID :  
Data Comment :

LC ☒ MS ☐ ALL

Max Intensity : 0

Time 0.031 Inten. 0.000

☒ Instrument Parameters View Normal ☒ Advanced End Time : 5.01 min Download

MS ☒ Interface ☐ Data Acquisition ☐ LC Time Prog. ☐ Pump ☐ Column Oven ☐ Controller ☐ Autosampler ☐ AutoPurge

☒ Positive ☐ Negative End Time: 5.000 min ☐ Use MS Program Edit...

LC **Ready**

MS **DEMO/Ready**

Details...

Item	Value	Setting	Units
Nebulizing Gas	----	0.0	L/min
Heat Block Te	0	0	C
Detector Volta	----	0.00	kV
Drying Gas Flo	----	0.0	L/min
Interface	ESI		
Interface Curre	0.0		uA
DL Temperatur	0	0	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic fl	Isocratic fl	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressu	0.0		MPa
Pump B Pressu	0.0		MPa
Pump A Degas	0		kPa
Pump B Degas	0		kPa
Oven Temperat	0.0	40	C
Temperature Li	160	160	C
Vial No. (Autos			
Injection Volu			uL

Message

Message /

Sub Message

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

Main Data Acquisition Realtime Batch Report Format Calibration Curve Batch Editor **System Control** Acquisition

LCReady MS DEMO/Ready

Sample Name :  
Sample ID :  
Data Comment :

ALL

**Main**

Max Intensity : 0

Time 1.575 Inten. 0.000

0.75  
0.50  
0.25  
0.00

0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 min

Instrument Parameters View Normal Advanced End Time: 5.01 min Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time: 5.000 min Use MS Program Edit...

**點選System Control**

Details...

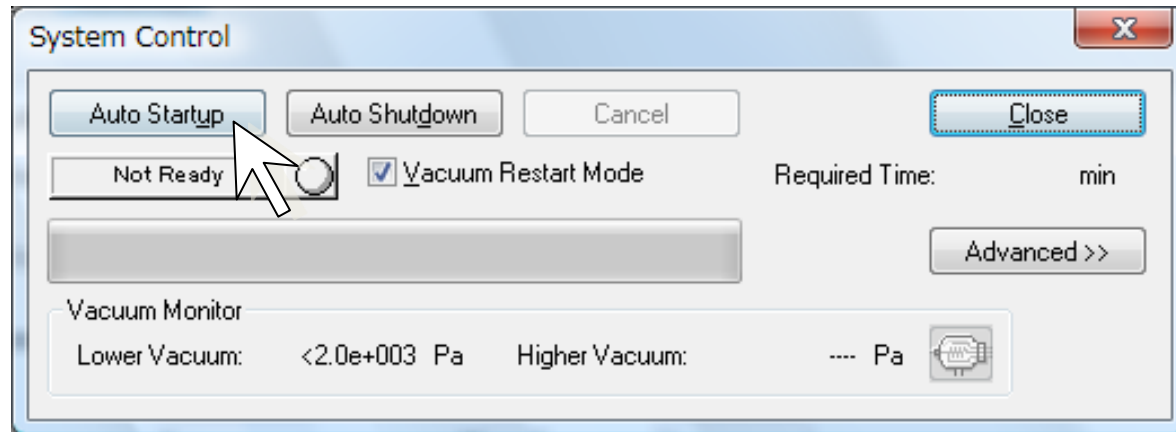
Item	Value	Setting	Units
Nebulizing Gas	----	0.0	L/min
Heat Block Te	0	0	C
Detector Volta	----	0.00	kV
Drying Gas Flo	----	0.0	L/min
Interface	ESI		
Interface Curre	0.0		uA
DL Temperatur	0	0	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic fl	Isocratic fl	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressu	0.0		MPa
Pump B Pressu	0.0		MPa
Pump A Degas	0		kPa
Pump B Degas	0		kPa
Oven Temperat	0.0	40	C
Temperature Li	160	160	C
Vial No. (Autos			
Injection Volu			uL

Message Sub Message

Message /

D: 29GB Free NUM

# 抽真空



# 確認儀器運作數值

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MSDEMO/Ready

Sample Name :

Sample ID :

Data Comment :

LC MS ALL

1.00 (x1,000,000)

Time 0.052 Inten. 0.000

Max Intensity : 0

0.75

0.50

0.25

0.00

0.00

0.25

0.50

0.75

1.00

1.25

1.50

1.75

min

Instrument Parameters View

Normal Advanced

End Time : 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative

End Time: 5.000 min

Use MS Program Edit...

LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Message

Sub Message

Message /

D: 29GB Free

NUM

# 真空值

- CID gas off

Unit (Pa)		PG		IG
		LCMS-8050	LCMS-8060	
DL Closed *1	septum	< 0.9	< 40	< 4.4*10 <sup>-4</sup>
	DL plug	< 40		< 5.0*10 <sup>-4</sup>
DL open *2		84 to 184	133 to 207	< 6.0*10 <sup>-4</sup>

\*1: Heater Off.

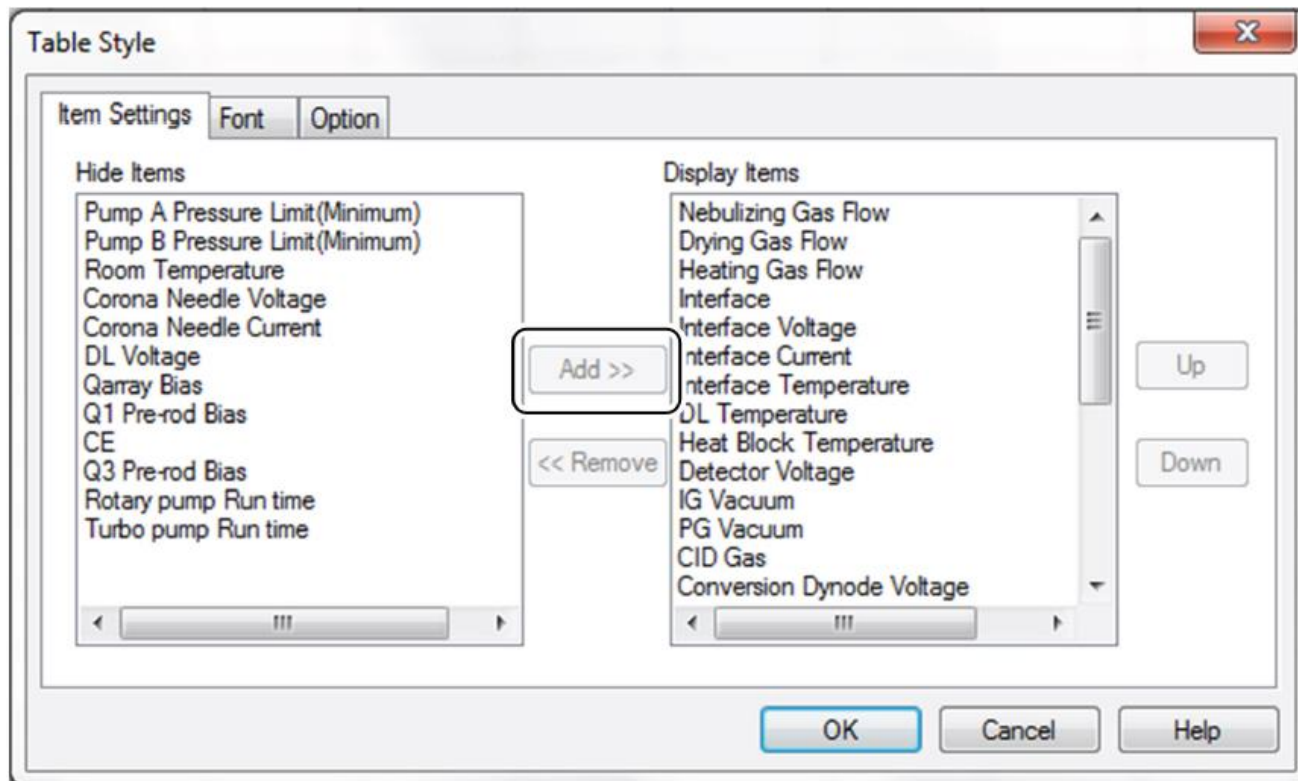
\*2: DL: 250 °C/BLK 400 °C is set after 1 hour has elapsed

- ex. CID gas on (DL open, DL=250°C, BLK=400°C)

DL Temperature	250	250	C
Heat Block Temperat	400	400	C
Detector voltage		1.80	kV
CID Gas	270	270	kPa
IG Vacuum	1.6e-003		Pa
PG Vacuum	1.4e+002		Pa



- 儀器數值視窗按滑鼠右鍵> Table Style
- 可[Add], [Remove] 監控儀器數值



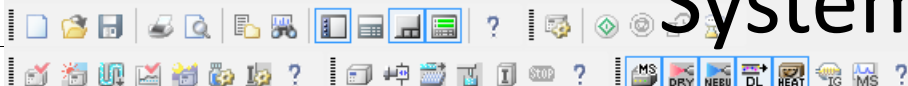
# 所有儀器數值, 都可在Monitor Detail 顯示

Monitor Details				
<div> <div>MS</div> <div>Pump</div> <div>Autosampler</div> <div>Oven</div> </div>				
<hr/>				
Nebulizing Gas Flow :	3.0		L/min	
Drying Gas Flow :	15.0		L/min	
Interface :	ESI			
Interface Voltage :	0.0		kV	
Interface Current :	0.0		uA	
DL Voltage :	0.0		V	
DL Temperature :	250		C	
Heat Block Temperature :	400		C	
Qarray Bias :	0.0		V	
Q1 Pre-rod Bias :	0.0		V	
CE :	0.0		V	
Q3 Pre-rod Bias :	0.0		V	
Detector Voltage :	0.00		kV	
IG Vacuum :	----		Pa	
PG Vacuum :	7.7e+001		Pa	
CID Gas :	230		kPa	
System Check Parameters	Current		Replace At	
<hr/>				
Rotary pump Run time :	67	hr	15000	hr
Turbo pump Run time :	67	hr	33500	hr

# System Check

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



Main

System Configuration

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Tuning

Acquisition

Tuning

LCReady MSDEMO/Ready

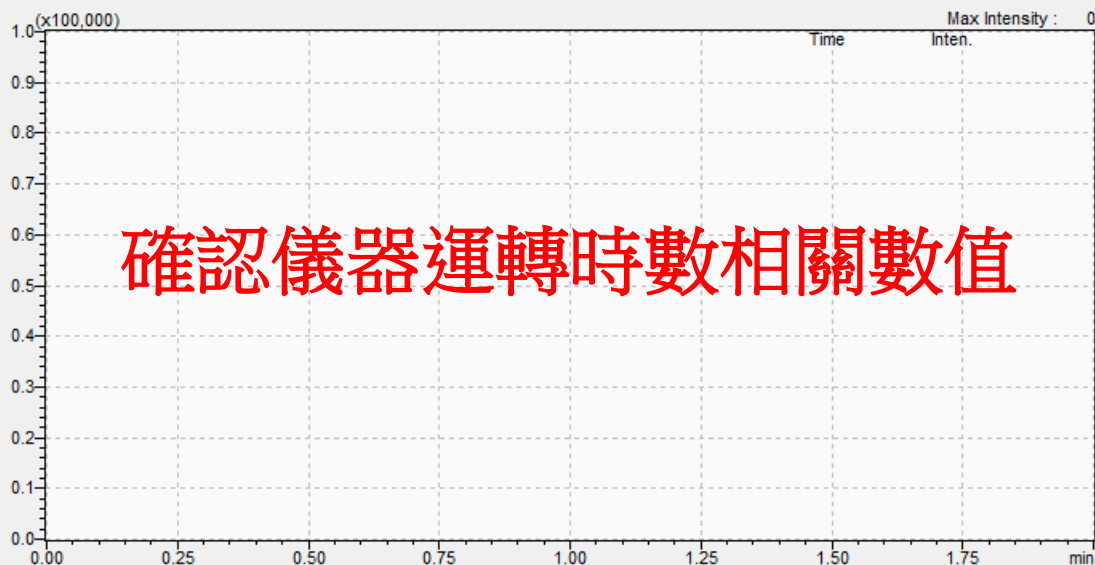
Sample Name : Q1PreBias #1 Q1PreBias:-30.00to-10.00

Sample ID :

Data Comment :

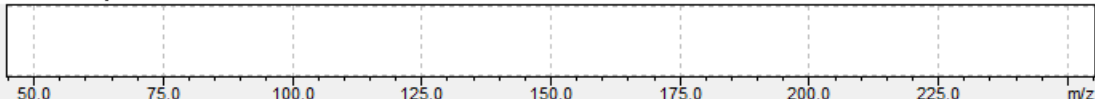
LC MS ALL

MS Running Time: 0.00 / 5.00 min Scan#: 0 Inten.: 0

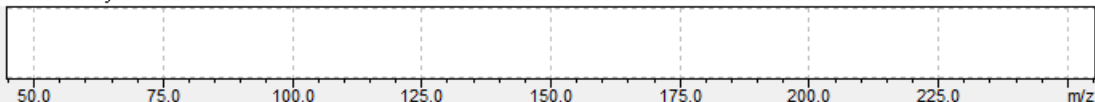


確認儀器運轉時數相關數值

Event#: 1 Polarity: + Mode: MRM



Event#: 2 Polarity: + Mode: MRM



LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

## System Check

Last Status

Date:

Result:

Not tested

☒ Report Out☒ View Result

Expected Run Time :

Remaining Time :

LC

MS

☒ Consumables Check☐ Advanced Report☒ LC Check

Advanced

☐ Detector Wavelength Check

Run

Stop

View Results...

Advanced &lt;&lt;

Close

Help

Reset...

### System Check

Last Status

Date:

Result:

☒ Report Out

☒ View Result

Expected Run Time :

Remaining Time :

LCMS

☒ Consumables Check

☒ MS Check

Run

Stop

View Results...

Advanced <<

Close

Help

Reset...

System Check

Last Status

Date:

Result:

☒ Report Out  
☒ View Result

Expected Run Time : 00:01:35

Checking LC...

Remaining Time : 00:01:22

PUMP A : Done

PUMP B : Checking

OVEN :

A.SMPL :

SYS CON :

LC MS

☒ Consumables Check  
☒ MS Check

Run

Stop

View Results...

Advanced <<

Close

Help

Reset...

### System Check

Last Status

Date:

Result:

☒ Report Out

☒ View Result

Expected Run Time : 00:01:35

Checking LCMS-QP...

Remaining Time : 00:00:00

MS Unit : Checking

LCMS

☒ Consumables Check

☒ MS Check

Run

Stop

View Results...

Advanced <<

Close

Help

Reset...

## System Check Results

Load...

Print

Date Checked : 2012/3/8 上午 10:36:20

Checked by : System Administrator

Summary : **Fail**

Software Version : 5.40.233

Unit ID: LC-30AD

Unit ID: LC-30AD

Unit ID: LC-30AD

Unit ID: LC-30AD

Unit ID: LC-30AD

Unit Name LCMS-8030

<<GENERAL>>

Serial Number DemoMode

<<Vacuum Unit>>	Current	Replace At	Period Used	Status
Turbo Pump Run Time(hr)	66	33500	(0%)	Pass
Rotary Pump Run Time(hr)	66	15000	(0%)	Pass
Rotary Pump Oil (hr)	0	3000	(0%)	Pass
Low Vacuum(Pa)	7.7e+001			Pass
High Vacuum(Pa)	2.1e-004			Pass

Close

Help



## System Check Results

Load...

Print

Date Checked : 2012/3/8 上午 10:36:20  
 Checked by : System Administrator  
 Summary : **Fail**  
 Software Version : 5.40.233

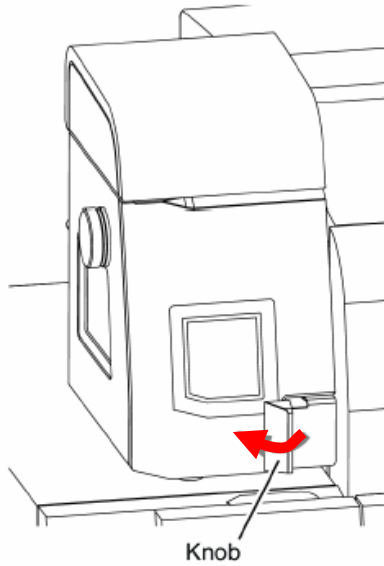
High Vacuum(Pa)	2.1e-004			Pass
<<Heater Unit>>				
	Current	Setting		Status
Q1RF Heater(degC)	0	0		Pass
Q3RF Heater(degC)	0	0		Pass
DL Thermo Sensor Check				Pass
Heat Block Thermo Sensor Check				Pass
DL Temperature(degC)	0			
Heat Block Temperature(degC)	0			
<<Gas Unit>>				
	Current	Setting		Status
Nebulize Gas Status	Close			
Drying Gas Status	Close			
CID Gas Status	Open			
CID Gas(kPa)	20	20		
CID Gas Check	2.1e-004			Fail
<<HV Unit>>				
	Current	Replace At	Period Used	Status
Detector Used Time(hr)	0	10000	(0%)	Pass

Close

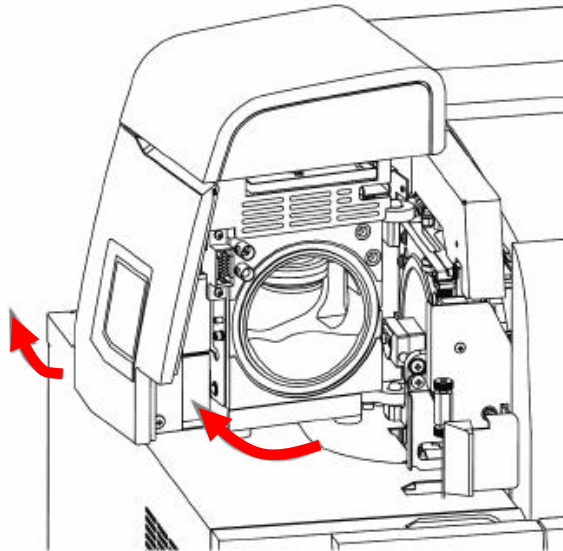
Help

# 拆卸離子源

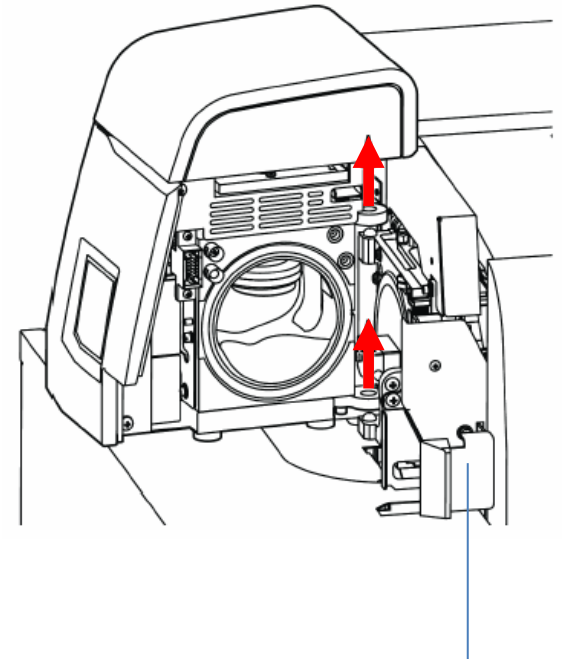
1.



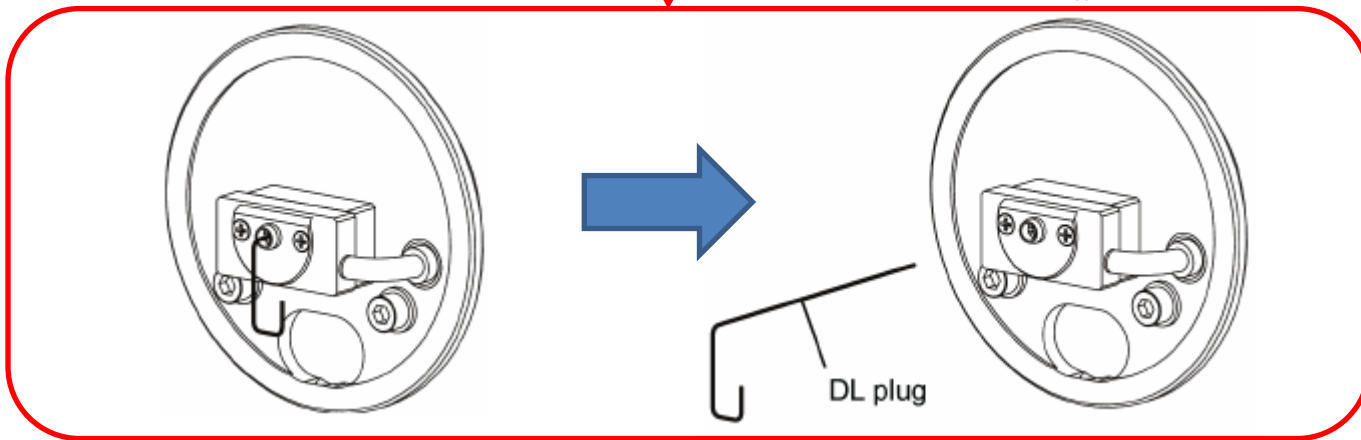
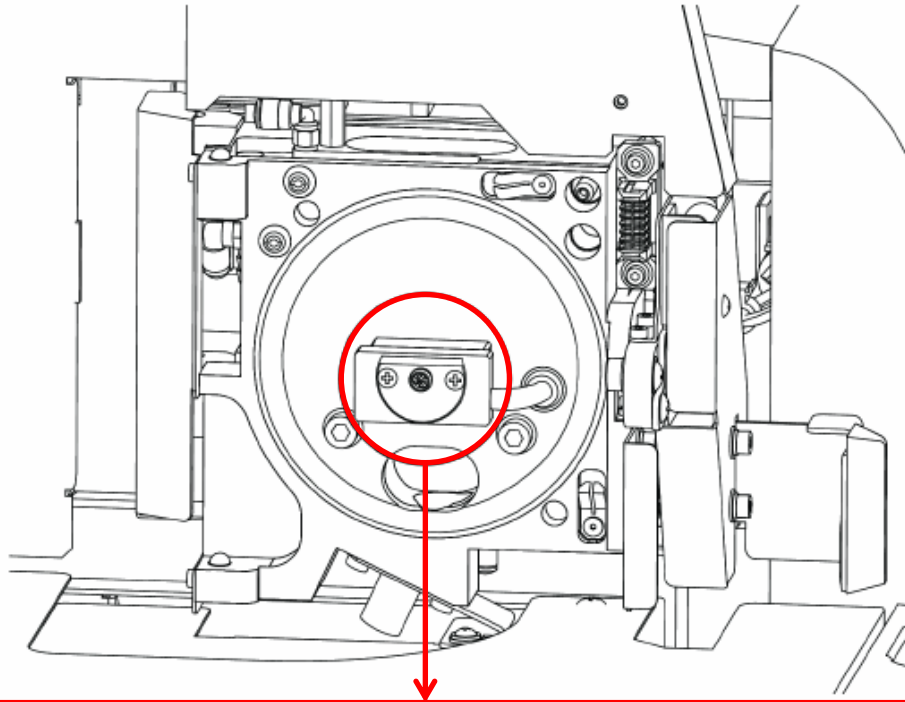
2.



3.

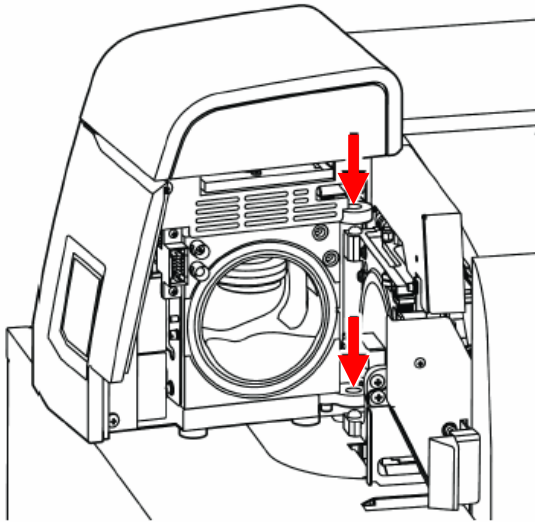


# 取下進樣口 DL Plug

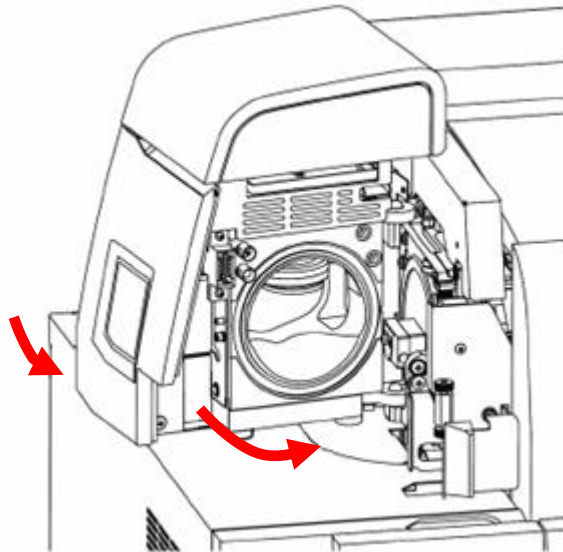


# 安裝離子源

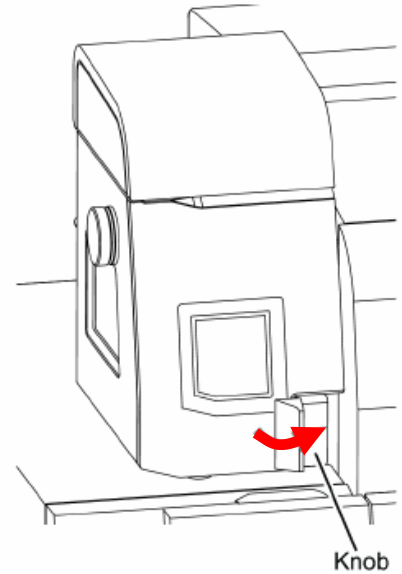
1.



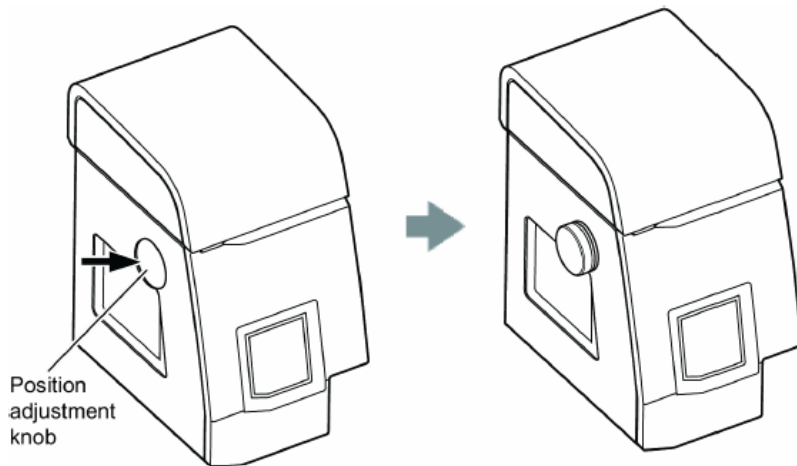
2.



3.



# 調整離子源位置



- ESI analysis:

0.2 ~ 0.5 mL/min → -1 to +2 mm

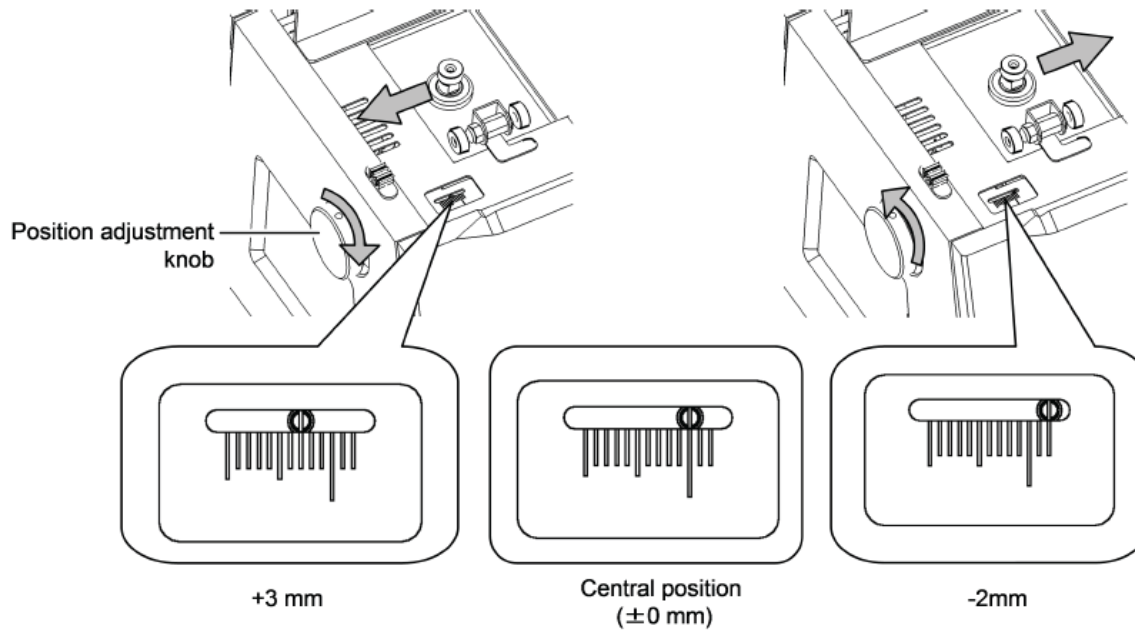
1 mL/min → +3 mm or greater

- DUIS analysis:

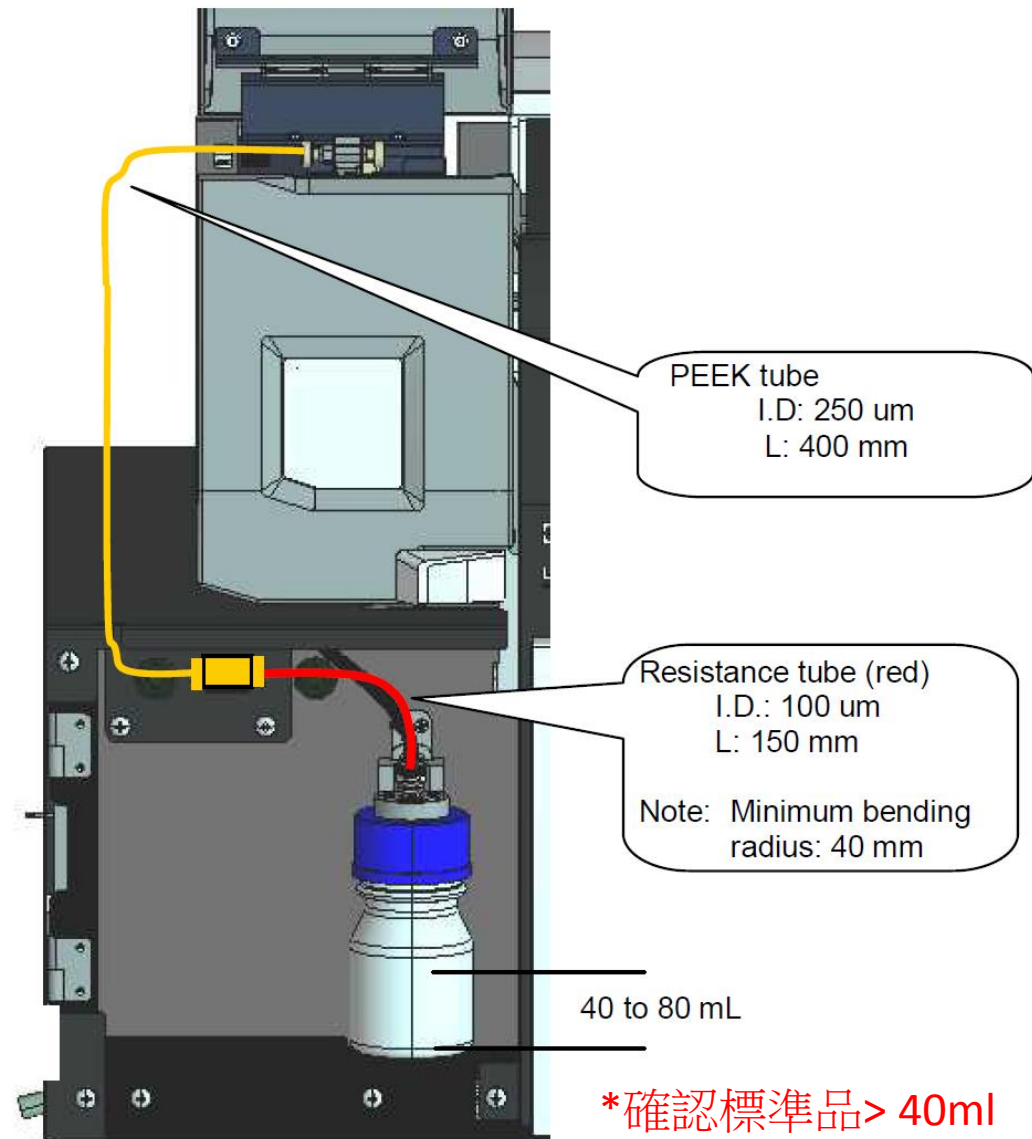
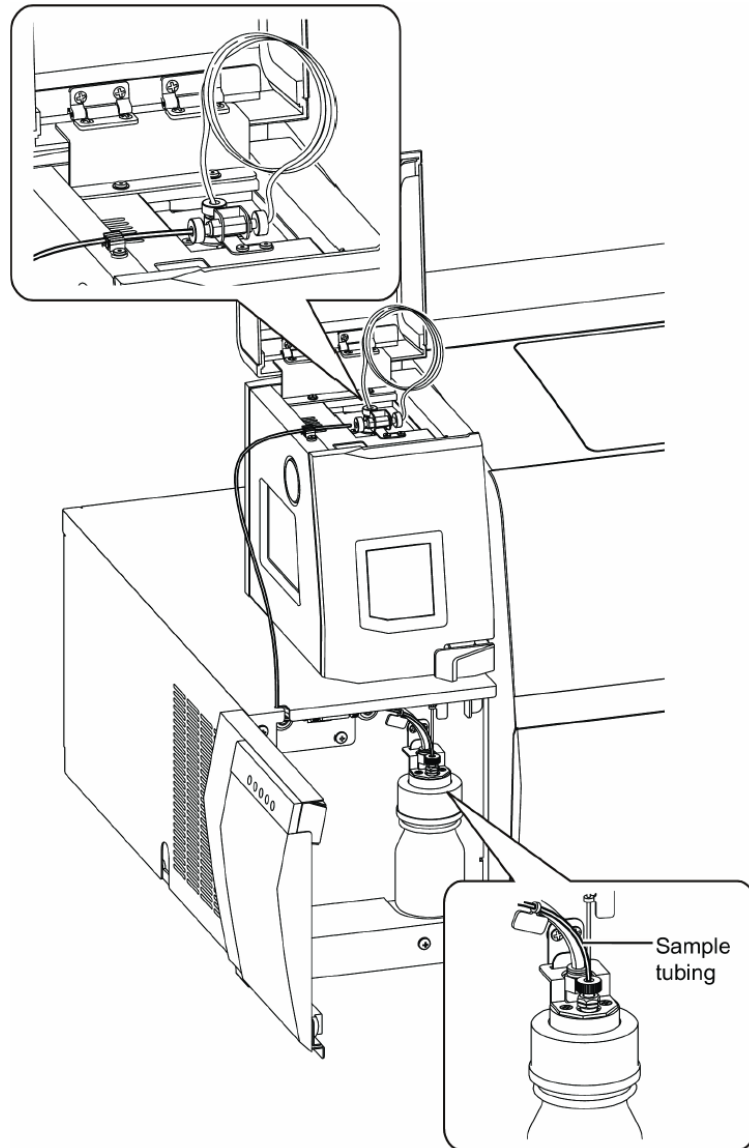
0 to +3 mm

- Auto tuning:

+1.5 mm



# 接上auto-tuning Standard sample



Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

Main

LCReady MS DEMO/Ready

Sample Name :  
Sample ID :  
Data Comment :

ALL

Max Intensity : 0

Time 0.211 Inten. 0.000

0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 min

Instrument Parameters View

Normal Advanced End Time : 5.01 min

Download

Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time : 5.000 min Use MS Program Edit...

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Message Sub Message

Message /

D: 29GB Free NUM



Realtime Analysis (LCMS-8030-System Administrator) - [MS Tuning - 20110808.lct]

File View Instrument Tuning CID Gas Acquisition Mode Polarity Tools Window Help

Product Ion Scan

Interface: ESI Tuning Date/Time: Q1 Resolution: Unit Q3 Resolution: Unit

Inten: 0 FWHM: 0.00 Inten: 0 FWHM: 0.00 Inten: 0 FWHM: 0.00 Inten: 0 FWHM: 0.00

Auto-Tuning Start

執行Autotuning Start

Tuning Condition H/W Parameters Voltage of Lens

Tuning Mode: -----

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flow	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Message Sub Message

Message /

D: 29GB Free NUM



Auto-Tuning

Interface: ESI

Time: 23 sec

Stop

Total: 1 %

Step: Injecting Standard Sample - 9 %

#: 2/172

Auto-Tuning Condition

☒ Positive  
☒ Negative  
☒ Detector Adjustment  
☒ Sensitivity Adjustment  
☒ Resolution Adjustment  
FWHM of Spectral Peak: 0.6  
☒ m/z Calibration

H/W Parameters

Nebulizing Gas:	1.50	L/min	DL:	250	C
Mon.:	1.50	L/min	Mon Temp:	250	C
Drying Gas:	15.00	L/min	Heat Block:	400	C
Mon.:	----	L/min	Mon Temp:	400	C
CID Gas.:	230	kPa	Conversion Dynode:	0.00	kV
Mon.:	230	kPa	Detector:	0.00	kV
Interface:	0.00	kV	PG Vacuum:	7.7e+001	Pa
Mon Current:	0.00	uA	IG Vacuum:	2.1e-004	Pa

Auto Tuning約20分鐘，結束後會自動列印條校結果報告

正離子

操作模式

LC/MS/MS Tuning

### Sample Information ###

Sample Type: PEG+PPG+Raffinose

### Tuning Condition ###

Detector Adjustment: On  
Resolution Adjustment: 0.70  
FWHM of Spectrum: 0.70  
Sensitivity Adjustment: On  
Mass Calibration: On

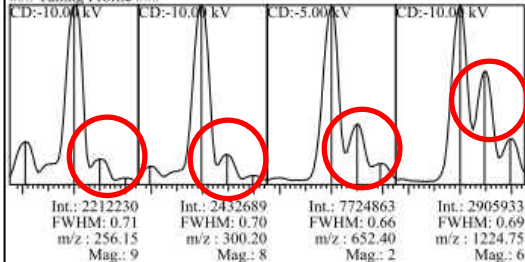
### Tuning Result ###

Model: LCMS-8060  
Interface: ESI  
Polarity: Pos  
Tuning Mode: Auto  
Tuning Date: 2015/04/21 15:26:21  
Acquisition Mode: Q1 Scan(Use CID Gas)

Nebulizing Gas Flow: 1.50(settings : 1.50) L/min  
Drying Gas Flow: 0.00(settings : 10.00) L/min  
CID Gas Flow: 270(settings : 270) kPa  
Interface Bias: +4.00 kV  
Interface Current: 0.61 uA  
DL Temp.: 250(settings : 250) C  
Heat Block Temp.: 400(settings : 400) C  
Q1 RF Gain: 4996  
Q1 RF Offset: 4960  
Q3 RF Gain: ---  
Q3 RF Offset: ---  
Q1 Post-rod Bias: -5.0 V  
CID CELL Exit Lens: -4.0 V  
Conversion Dynode: -10.00 kV  
Detector: -1.78(-1.78) kV  
PG Vacuum: 1.2e+002 Pa  
IG Vacuum: 2.3e-003 Pa

偵測器電壓  
< -2.2 kV

### Tuning Profile ###



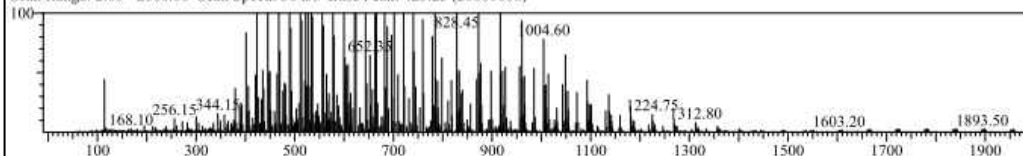
1. 峰型是否正常?
2. 同位素峰有無明顯分開?

峰型分叉



X

Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.25 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.10	0.05	---	---
168.10	168.10	0.00	---	---
256.15	256.15	0.00	0.71	2212230
300.20	300.15	-0.05	0.70	2432689
344.20	344.15	-0.05	---	---
652.40	652.35	-0.05	0.66	7724863
828.50	828.45	-0.05	---	---
1004.60	1004.60	0.00	---	---
1224.75	1224.75	0.00	0.69	2905933
1312.80	1312.80	0.00	---	---
1603.15	1603.20	0.05	---	---
1893.40	1893.50	0.10	---	---

峰寬(FWHM):  
0.51 ~ 0.80

高質量強度

LCMS-8050: > 200,000  
LCMS-8060: > 400,000

質量差距:  
± 0.15 u

		Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
DL Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray RF	Scant	+50.0	+27.1	+70.0	+90.0	+110.0	+130.0	+130.0	+130.0
Multipole RF	Scant	+100.0	+20.0	+50.0	+130.0	+190.0	+300.0	+300.0	+300.0
Multipole1 Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Multipole1 Lens	Const	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Multipole2 Bias	Const	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
Multipole2 Lens	Const	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Q1 Bias	Const	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5
CC Lens1	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
CC Lens2	Const	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
CC Lens3	Const	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
CC RF	Scant	Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
CE	Scant	+200.0	+50.0	+90.0	+130.0	+300.0	+300.0	+300.0	+300.0
Q3 Bias	Scant	-15.0	-15.0	-15.0	-16.0	-17.0	-21.0	-25.0	-25.0
Q3 Bias	Scant	-15.0	-15.0	-15.0	-15.1	-15.2	-15.6	-16.0	-17.0
Q1 Pre Bias	Scant	Const	107.15	107.15	1893.40				
Q3 Pre Bias	Scant	-15.0	-5.0	-50.0	-50.0				

# 負離子

操作模式

## ### Sample Information ###

Sample Type: PEG+PPG+Raffinose

## ### Tuning Condition ###

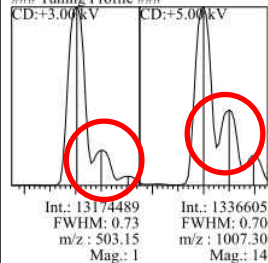
Detector Adjustment: On  
Resolution Adjustment: On  
FWHM of Spectrum: 0.70  
Sensitivity Adjustment: On  
Mass Calibration: On

## ### Tuning Result ###

Model: LCMS-8060  
Interface: ESI  
Polarity: Neg  
Tuning Mode: Auto  
Tuning Date: 2015/04/21 15:31:32  
Acquisition Mode: Q1 Scan(Use CID Gas)

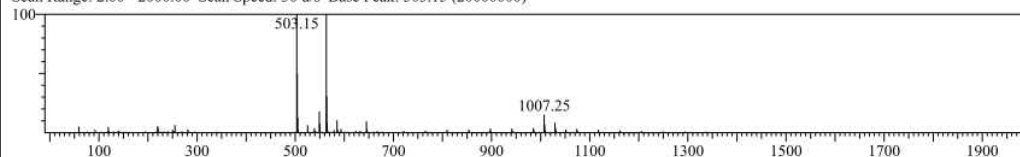
Nebulizing Gas Flow: 1.50(settings : 1.50) L/min  
Drying Gas Flow: 0.00(settings : 10.00) L/min  
CID Gas Flow: 270(settings : 270) kPa  
Interface Bias: -3.00 kV  
Interface Current: 0.54 uA  
DL Temp.: 250(settings : 250) C  
Heat Block Temp.: 399(settings : 400) C  
Q1 RF Gain: 5001  
Q1 RF Offset: 5000  
Q3 RF Gain: ---  
Q3 RF Offset: ---  
Q1 Post-rod Bias: 5.0 V  
CID CELL Exit Lens: 3.5 V  
Conversion Dynode: +10.00 kV  
Detector: -1.78(-1.78) kV  
PG Vacuum: 1.2e+002 Pa  
IG Vacuum: 2.3e-003 Pa

## ### Tuning Profile ###



1. 峰型是否正常？
2. 同位素峰有無明顯分開？

Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.73	13174489
1007.30	1007.25	-0.05	0.70	1336605

峰寬(FWHM):  
0.51 ~ 0.80

質量差距:  
± 0.15 u

		Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
DL Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray RF	Scan	+50.0	+27.1	+70.0	+90.0	+110.0	+130.0	+130.0	+130.0
Multipole RF	Scan	+100.0	+20.0	+50.0	+130.0	+190.0	+300.0	+300.0	+300.0
Multipole1 Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Multipole1 Lens	Const	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2
Multipole2 Bias	Const	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2
Multipole2 Lens	Const	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0
Q1 Bias	Const	+3.5	+5.0	+5.0	+5.0	+5.0	+5.0	+5.0	+5.0
CC Lens1	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
CC Lens2	Const	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
CC Lens3	Const	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0
		Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
CC RF	Scan	+200.0	+50.0	+90.0	+130.0	+300.0	+300.0	+300.0	+300.0
CE	Scan	+15.0	+15.0	+15.0	+16.0	+17.0	+21.0	+25.0	+25.0
Q3 Bias	Scan	+15.0	+15.0	+15.0	+15.1	+15.2	+15.6	+16.0	+17.0
		Const	107.15	1071.50	1893.40				
Q1 Pre Bias	Scan	+15.0	+5.0	+50.0	+50.0				
Q3 Pre Bias	Scan	+15.0	+5.0	+50.0	+50.0				

正離子

MS/MS

操作模式

## ### Sample Information ###

Sample Type: PEG+PPG+Raffinose

## ### Tuning Condition ###

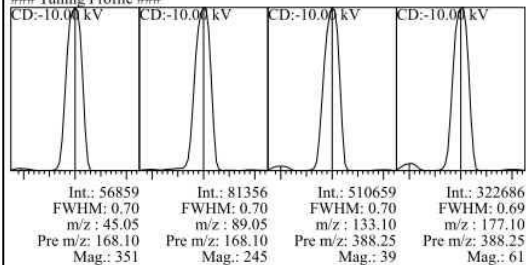
Detector Adjustment: On  
Resolution Adjustment: On  
FWHM of Spectrum: 0.70  
Sensitivity Adjustment: On  
Mass Calibration: On

## ### Tuning Result ###

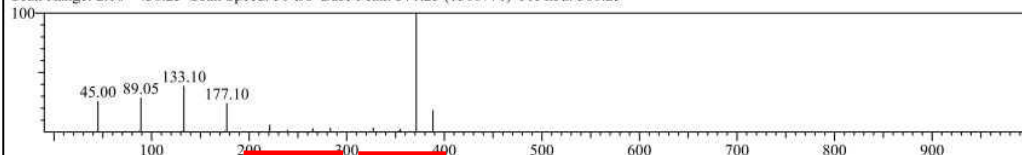
Model: LCMS-8060  
Interface: ESI  
Polarity: Pos  
Tuning Mode: Auto  
Tuning Date: 2015/04/21 15:42:01  
Acquisition Mode: Product Scan

Nebulizing Gas Flow: 1.50(settings : 1.50) L/min  
Drying Gas Flow: 0.00(settings : 10.00) L/min  
CID Gas Flow: 270(settings : 270) kPa  
Interface Bias: +4.00 kV  
Interface Current: 0.67 uA  
DL Temp.: 250(settings : 250) C  
Heat Block Temp.: 400(settings : 400) C  
Q1 RF Gain: 4996  
Q1 RF Offset: 4960  
Q3 RF Gain: 5000  
Q3 RF Offset: 5004  
Q1 Post-rod Bias: -5.0 V  
CID CELL Exit Lens: -1.3 V  
Conversion Dynode: -10.00 kV  
Detector: -1.78(-1.78) kV  
PG Vacuum: 1.2e+002 Pa  
IG Vacuum: 2.3e-003 Pa

## ### Tuning Profile ###



Scan Range: 2.00 - 438.25 Scan Speed: 30 u/s Base Peak: 371.25 (1306770) Pre m/z: 388.25



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
168.10 > 45.05	45.05	---	0.70	56859
168.10 > 89.05	89.05	---	0.70	81356
388.25 > 45.05	45.00	-0.05	---	---
388.25 > 89.05	89.05	0.00	---	---
388.25 > 133.10	133.10	0.00	0.70	510659
388.25 > 177.10	177.10	0.00	0.69	322686

峰寬(FWHM):  
0.51 ~ 0.80

質量差距:  
± 0.15 u

		Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
DL Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray RF	Scan	+50.0	+27.1	+70.0	+90.0	+110.0	+130.0	+130.0	+130.0
Multipole RF	Scan	+100.0	+20.0	+50.0	+130.0	+190.0	+300.0	+300.0	+300.0
Multipole1 Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Multipole1 Lens	Const	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Multipole2 Bias	Const	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
Multipole2 Lens	Const	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Q1 Bias	Const	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5
CC Lens1	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
CC Lens2	Const	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
CC Lens3	Const	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0	-20.0
CC RF	Scan	Const	45.05	89.05	133.10	168.10	1893.40		
CE	Scan	+80.0	+80.0	+140.0	+300.0	+300.0	+300.0		
Q3 Bias	Scan	-20.0	-25.0	-15.0	-15.0	-15.0	-15.0		
	Scan	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0		
Q1 Pre Bias	Scan	Const	107.15	1071.50	1893.40				
Q3 Pre Bias	Scan	-15.0	-5.0	-50.0	-50.0				
	Scan	-15.0	-5.0	-50.0	-50.0				

負離子

MS/MS

操作模式

### ### Sample Information ###

Sample Type: PEG+PPG+Raffinose

### ### Tuning Condition ###

Detector Adjustment: On  
Resolution Adjustment: On  
FWHM of Spectrum: 0.70  
Sensitivity Adjustment: On  
Mass Calibration: On

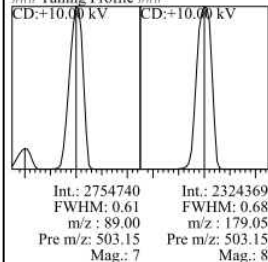
### ### Tuning Result ###

Model: LCMS-8060  
Interface: ESI  
Polarity: Neg  
Tuning Mode: Auto  
Tuning Date: 2015/04/21 15:42:02

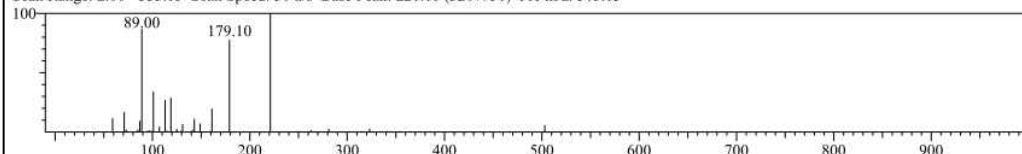
Acquisition Mode: Product Scan

Nebulizing Gas Flow: 1.50(settings : 1.50) L/min  
Drying Gas Flow: 0.00(settings : 10.00) L/min  
CID Gas Flow: 270(settings : 270) kPa  
Interface Bias: -3.00 kV  
Interface Current: 0.60 uA  
DL Temp.: 249(settings : 250) C  
Heat Block Temp.: 400(settings : 400) C  
Q1 RF Gain: 5001  
Q1 RF Offset: 5000  
Q3 RF Gain: 4999  
Q3 RF Offset: 4966  
Q1 Post-rod Bias: 5.0 V  
CID CELL Exit Lens: 0.7 V  
Conversion Dynode: +10.00 kV  
Detector: -1.78(-1.78) kV  
PG Vacuum: 1.2e+002 Pa  
IG Vacuum: 2.3e-003 Pa

### ### Tuning Profile ###



Scan Range: 2.00 - 553.15 Scan Speed: 30 u/s Base Peak: 221.10 (3207931) Pre m/z: 503.15



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15 > 89.00	89.00	0.00	0.61	2754740
503.15 > 179.05	179.10	0.05	0.68	2324369

質量差距:  
± 0.15 u

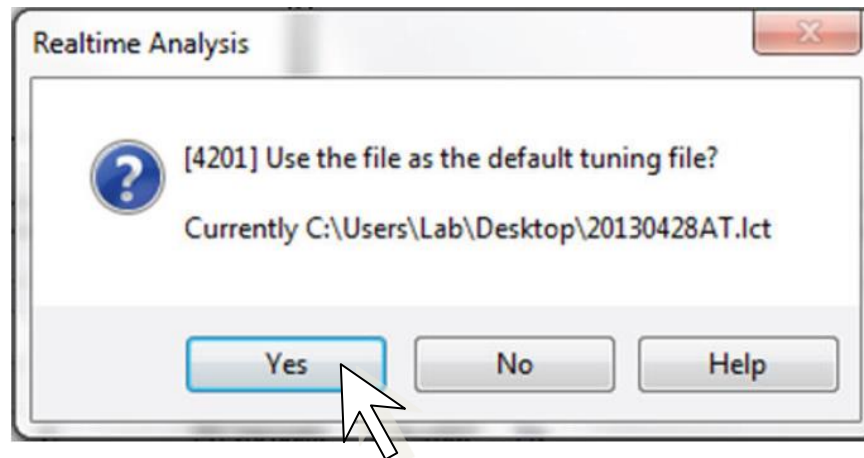
峰寬(FWHM):  
0.51 ~ 0.80

		Const	65.05	168.10	256.15	344.20	652.40	1004.60	1893.40
DL Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Qarray RF	Scan	+50.0	+27.1	+70.0	+90.0	+110.0	+130.0	+130.0	+130.0
Multipole RF	Scan	+100.0	+20.0	+50.0	+130.0	+190.0	+300.0	+300.0	+300.0
Multipole1 Bias	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Multipole1 Lens	Const	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2
Multipole2 Bias	Const	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2	+1.2
Multipole2 Lens	Const	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0
Q1 Bias	Const	+3.5	+3.5	+3.5	+3.5	+3.5	+3.5	+3.5	+3.5
CC Lens1	Const	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
CC Lens2	Const	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0	+100.0
CC Lens3	Const	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0	+20.0
		Const	45.05	89.05	133.10	168.10	1893.40		
CC RF	Scan	+80.0	+80.0	+140.0	+300.0	+300.0	+300.0		
CE	Scan	+30.0	+30.0	+30.0	+30.0	+30.0	+30.0		
Q3 Bias	Scan	+7.0	+7.0	+7.0	+7.0	+7.0	+9.0		
		Const	107.15	1071.50	1893.40				
Q1 Pre Bias	Scan	+15.0	+5.0	+50.0	+50.0				
Q3 Pre Bias	Scan	+15.0	+5.0	+50.0	+50.0				



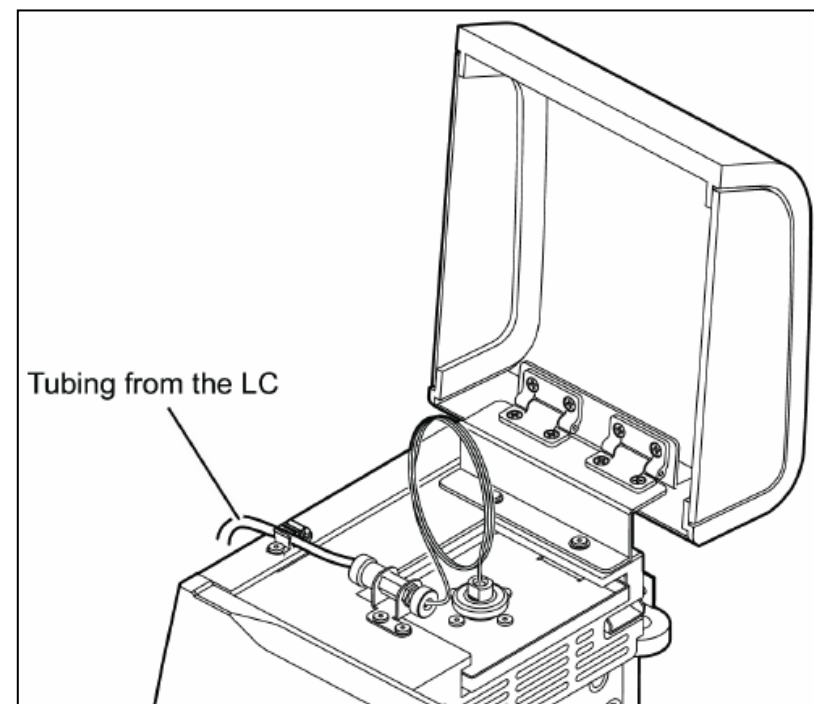
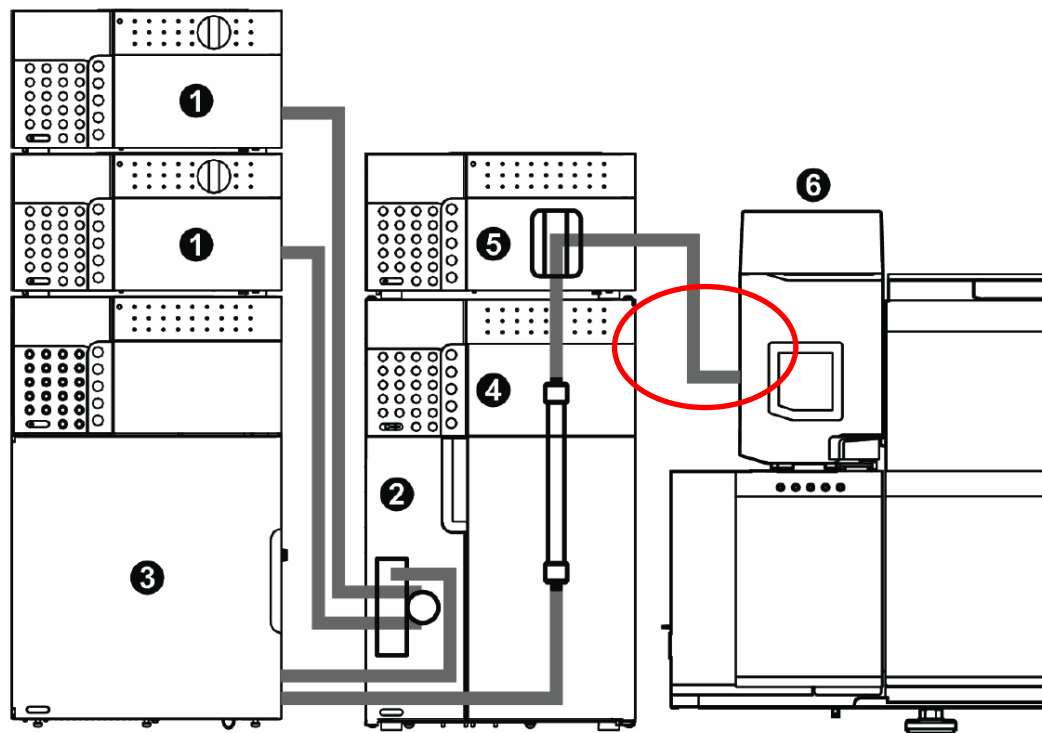
# 儲存 Tuning File

- [Save Tuning File As] 將Tuning file 存成\*.lct



- [Yes] 將此tuning file 當成預設tuning file.
- [No] 則否
- 分析時可指定tuning file, 若無指定則會自動使用預設的tuning file

# 拆掉Tuning 管路, 接上LC 分析流路



Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MS DEMO/Ready

Sample Name :  
Sample ID :  
Data Comment :

LC MS ALL

Max Intensity : 0

Time 0.015 Inten. 0.000

1.00 (x1,000,000)

0.75

0.25

0.00

0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 min

點選 Data Acquisition

Instrument Parameters View

Normal Advanced End Time : 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time: 5.000 min Use MS Program Edit...

Data Acquisition MS Tuning

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Message

Sub Message

MS: Auto-Tuning was terminated.  
MS: Auto-Tuning started.  
MS: Auto-Tuning was terminated.

Message /

D: 29GB Free NUM



# 設定MS 分析參數

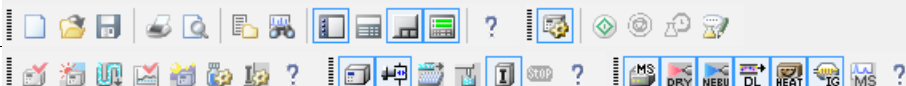
The screenshot displays the 'Realtime Analysis (LCMS-8030-System Administrator) - test2.lcm' window. The main title bar indicates the system name and file path. The interface is divided into several sections:

- Top Menu Bar:** File, Edit, View, Method, Instrument, Acquisition, Data Tools, Window, Help.
- Toolbar:** Contains various icons for file operations, instrument control, and data processing.
- Main Panel:**
  - Header:** LCReady MS DEMO/Ready
  - Instrument Parameters View:** Includes tabs for Normal, Advanced, and End Time: 5.01 min. A Download button is present.
  - MS Section:**
    - Interface Tab:** Shows settings for Positive/Negative ionization, End Time (0.000 min), and Use MS Program checkbox.
    - Data Acquisition Tab:** Features buttons for MRM(+), Product Ion Scan(+), Precursor Ion Scan(+), Neutral Loss Scan(+), SIM(+), and Scan(+).
    - LC Time Prog. Tab:** Includes CID Gas Settings... and Attenuation... buttons.
    - Pump Tab:** Includes Loop Time... button.
    - Column Oven Tab:**
    - Controller Tab:**
    - Autosampler Tab:**
    - AutoPurge Tab:**
  - Table:** A table with columns: Type, Event#, +/-, Compound Name, m/z, Time (0.000 min - 0.000 min). It currently contains no data rows.
- Right Panel:**
  - Status:** LC Ready, MS DEMO/Ready.
  - Details...** button.
  - Table:** A table listing various parameters and their values/settings.

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No.(Autosamp)			
Injection Volume			uL
- Bottom Panel:** Includes buttons for Tuning, Data Acquis..., and MS Tuning.

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



Main  
Acquisition

Instrument  
Parameters

Start  
Single Run

Stop

Snapshot

Data Analysis

Optimization for  
Method

Tuning

LCReady MSDEMO/Ready

Plot

Instrument Parameters View

Normal

Advanced

End Time: 10.00 min

Download

MS

Interface

Data Acquisition

LC Time Prog.

Pump

Column Oven

Controller

Autosampler

AutoPurge

Positive

Negative

End Time: 10.000 min

Use MS Program

Edit...

MRM(+)

Product Ion Scan(+)

Precursor Ion Scan(+)

Neutral Loss Scan(+)

SIM(+)

Scan(+)

Use CID Gas

CID Gas Settings...

Attenuation...

Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 10.000 min)
MRM	1	+	100.00>100.00		

MRM

Acq. Time: 0

- 10

min

Compound Name:

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	100.00	100.00	100.0	-35.0
Ch2				
Ch3				
Ch4				

Event Time: 0.103 sec

Q1 Resolution: Unit

Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event

Survey Event Settings...

Dependent Event:

Product Ion Scan

Add

LC

Ready

MS

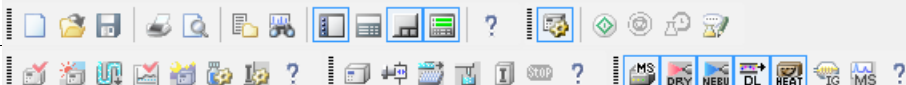
DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



Main  
Acquisition



Tuning

LCReady MSDEMO/Ready

Plot

Instrument Parameters View

Normal Advanced

End Time: 5.01 min

Download

MS

Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive

Negative

End Time: 2.000 min

Use MS Program

Edit...

MRM(+)

Product Ion Scan(+)

Precursor Ion Scan(+)

Neutral Loss Scan(+)

SIM(+)

Scan(+)

Use CID Gas

CID Gas Settings...

Attenuation...

Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 2.000 min)
MRM	1	+	reserpine	609.30>195.00	

MRM Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec

Q1 Resolution: Unit

Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event

Survey Event Settings...

Dependent Event:

Product Ion Scan

Add

LC

Ready

MS

DEMO/Ready

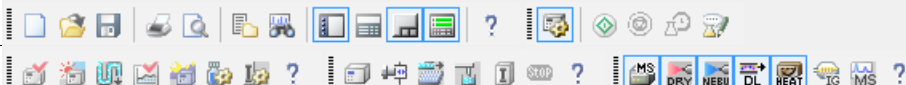


Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



Main  
Acquisition

Instrument  
Parameters

Start  
Single Run

Stop

Snapshot

Data Analysis

Optimization for  
Method

Tuning

LCReady MSDEMO/Ready

Plot

Instrument Parameters View

Normal Advanced

End Time: 5.01 min

Download

MS

Interface

Data Acquisition

LC Time Prog.

Pump

Column Oven

Controller

Autosampler

AutoPurge

Positive

Negative

End Time: 5.000 min

Use MS Program

Edit...

MRM(-)

Product Ion Scan(-)

Precursor Ion Scan(-)

Neutral Loss Scan(-)

SIM(-)

Scan(-)

Use CID Gas

CID Gas Settings...

Attenuation...

Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
MRM	1	+	reserpine	609.30>195.00,	
MRM	2	+	Sample_	+ 500.00>250.00,	
MRM	3	-	Sample_	- 150.00>100.00,	

MRM

Acq. Time: 3 - 4 min

Compound Name: Sample\_

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	150.00	100.00	100.0	35.0
Ch2	150.00	50.00	100.0	35.0
Ch3				
Ch4				

Event Time: 0.206 sec

Q1 Resolution: Unit

Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event

Survey Event Settings...

Dependent Event:

Product Ion Scan

Add

LC

Ready

MS

DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Advanced Settings

Interface Voltage

☐ Tuning File

☒ 4.5 kV

Micro Scan Width: 0 u

Pause Time/Dwell Time

☐ Auto Setting

☒ Set Value of Each Channel

☒ Dwell Time

☒ Pause Time

DL Bias/Qarray Bias

☒ Tuning File

☐ Method Setting

Q1 Pre-rod Bias

☐ Tuning File

☒ Method Setting

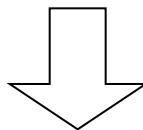
Q3 Pre-rod Bias

☐ Tuning File

☒ Method Setting

OK Cancel Help

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				



Ch	Precursor m/z	Product m/z	Pause Time (msec)	Dwell Time (msec)	Q1 Pre Bias(V)	CE	Q3 Pre Bi
Ch1	609.30	195.00	1.0	100.0	-20.0	-35.0	-14.0
Ch2	609.30	78.00	1.0	100.0	-20.0	-37.0	-11.0
Ch3							

# Interface

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MS DEMO/Ready

Instrument Parameters View Normal Advanced End Time : 5.01 min Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Interface: ESI

Interface Temperature:  C

DL Temperature:  C

Nebulizing Gas  L/min

Heat Block Temperature:  C

☒ Use Drying Gas

Drying Gas Flow:  L/min

Details...

Item	Value	Setting	Units
Nebulizing Gas Flow	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

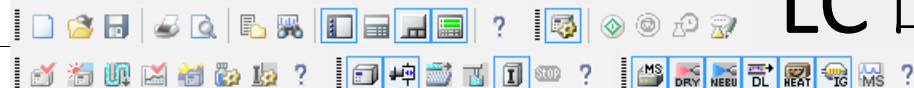
Tuning

Data Acquisi... MS Tuning

D: 29GB Free NUM

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



# LC時間

LCReady MSDEMO/Ready

Instrument Parameters View

Normal

Advanced

End Time : 5.01 min

Download

MS

Interface

Data Acquisition

LC Time Prog.

Pump

Column Oven

Controller

Autosampler

AutoPurge

LC Time Program

LC Stop Time: 5.01 min

Apply to All acquisition time

LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Data Acquisi...

MS Tuning



# 設定LC 參數

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MSDEMO/Ready

Instrument Parameters View Normal Advanced End Time: 5.01 min Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Max Intensity: 0 %

100 75 50 25 0

0.00 0.25 0.50 0.75 1.00

100.0 75.0 50.0 25.0 0.0

10.0 7.5 5.0 2.5 0.0

150.0 125.0 100.0 75.0 50.0 25.0

	Time	Module	Command	Value
1	0.01	Pumps	Pump B Conc.	20
2	2.00	Pumps	Pump B Conc.	20
3	5.00	Pumps	Pump B Conc.	60
4	5.01	Controller	Stop	
5	0.00			
6	0.00			
7	0.00			
8	0.00			
9	0.00			
10	0.00			
11	0.00			
12	0.00			

Load Data... Draw curve

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Load Data... Draw curve

Data Acquisition MS Tuning

D: 29GB Free NUM



# LC Time Program

LCReady MSDEMO/Ready

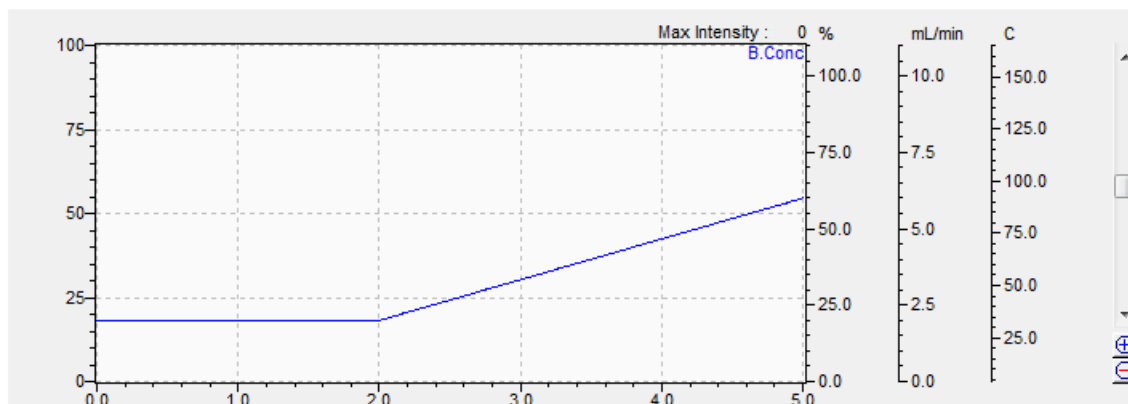
Instrument Parameters View

Normal Advanced

End Time: 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge



	Time	Module	Command	Value
1	0.01	Pumps	Pump B Conc.	20
2	2.00	Pumps	Pump B Conc.	20
3	5.00	Pumps	Pump B Conc.	60
4	5.01	Controller	Stop	
5	0.00			
6	0.00			
7	0.00			
8	0.00			
9	0.00			
10	0.00			
11	0.00			
12	0.00			

Load Data...

Draw curve

LC  
MS

Ready  
DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

# 設定 Pump 最大壓力

LCReady MSDEMO/Ready

Instrument Parameters View

Normal

Advanced

End Time: 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Mode Binary gradient

Total Flow: 0.2000 mL/min

Pump B Conc.: 20.0 %

Pump B Curve: 0

Configured Pumps

Pump A: LC-30AD

Pump B: LC-30AD

Pump C:

Pump D:

Compressibility Setting...

Pressure Limits (Pump A, B)

Maximum: 130.0 MPa

Minimum: 0.0 MPa

LC Ready

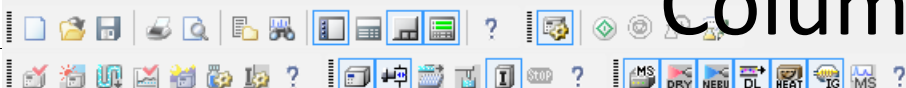
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flow	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help



# Column Oven

Main  
Acquisition

Instrument  
Parameters

Start  
Single Run

Stop

Snapshot

Data Analysis

Optimization for  
Method

Tuning

LCReady MSDEMO/Ready

Plot

Instrument Parameters View

Normal Advanced

End Time : 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Model: CTO-30A

☒ Column Oven

Oven Temperature: 40 C Temperature 160 C

Heat Compensation: AUTO Heat Compensation Flow: 0.2000 mL/min

Column

Column Name:

Column ID:

Length: 1 mm

Inner Diameter: 0.1 mm

Settings...

Read from CMD...

☐ Auto Load

LC  
MS

Ready

DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp			
Injection Volume			uL

Data Acquisi... MS Tuning

# Autosampler rack detect

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MS DEMO/Ready

Instrument Parameters View Normal Advanced End Time : 5.01 min Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Model: SIL-30AC ☒ Autosampler All Parameters

Injection Settings

Sample Rack: Rack 1.5 mL 105 vials **Detect Rack**

Needle Stroke: 52 mm

Control Vial Needle Stroke: 52 mm

Sampling Speed: 5.0 uL/sec

☐ Cooler Temperature: 15 C

Measuring Line Purge Volume: 100 uL

☐ Air Gap Volume: 0.1 uL

Rinse Type: External only Refer Flow Channels...

Rinse Settings

Rinsing Speed: 35 uL/sec

Rinsing Volume: 500 uL

Rinse Mode: Before and after aspiration

Rinse Dip Time: 0 sec

Rinse Pump

Rinse Method: Rinse port only

Rinse Time: 2 sec

Purge Settings

Purge Time

Rinse Port: Purging with Default R0 10.0 min

Measuring Line: Purging with Default R0 10.0 min

Pretreatment...

LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flow	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Data Acquisi... MS Tuning

D: 29GB Free NUM

# 儲存分析方法

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Help

New Method File Ctrl+N  
Open Method File... Ctrl+O  
Close Method File  
Save Method File Ctrl+S  
Save Method File As...  
Save Method File As Template...  
Load Method Parameters...  
Open Reference Data File...  
Close Reference Data File  
Select Project(Folder)...  
File Search...  
Audit Trail Log...  
Select Acquisition Printer...  
Print Setup...  
Print Method File  
Method File Properties...  
1 D:\消防基金LCMS\_Data\test2.lcm  
2 Analysis\_Method.lcm  
3 D:\消防基金LCMS\_Data\test.lcm  
Exit Alt+F4

Ready

Normal Advanced End Time: 5.01 min

Download

LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

End Time: 5.000 min Use MS Program Edit...

Precursor Ion Scan(-) Neutral Loss Scan(-) SIM(-) Scan(-)

Attenuation... Loop Time...

	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
	+	reserpine	609.30>195.00	
	+	Sample_+	500.00>250.00	
	-	Sample_-	150.00>100.00	

Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec Q1 Resolution: Unit Advanced Settings...

Q3 Resolution: Unit

☐ Use as Survey Event Survey Event Settings...

Dependent Event: Product Ion Scan Add

Optimization for Method

Tuning Data Acquisition MS Tuning

Save the active method file with a new name.

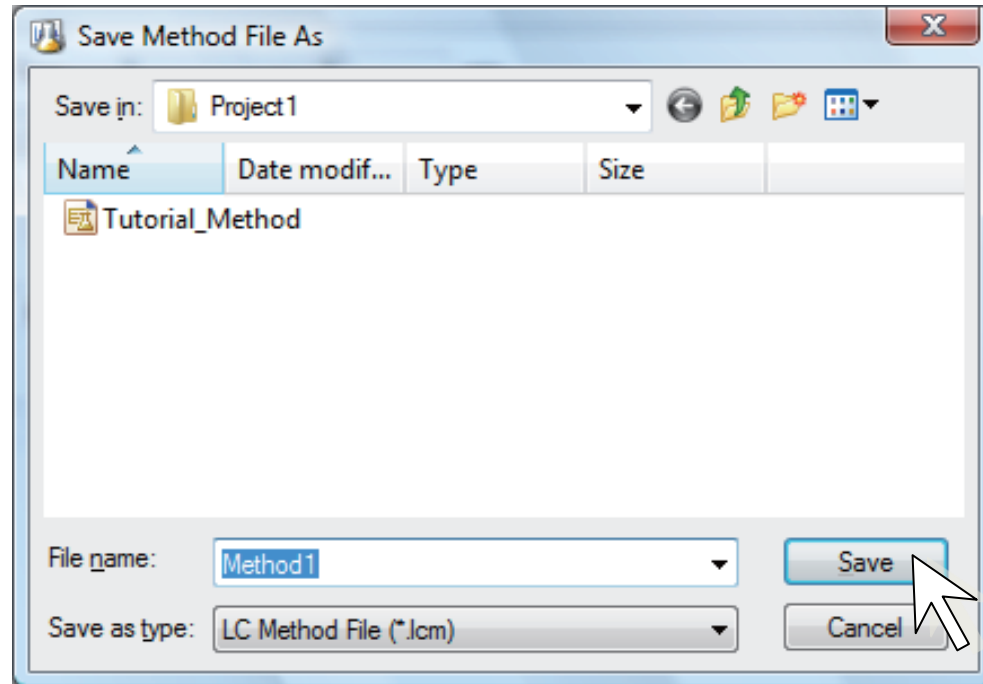
D: 29GB Free NUM

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

# 設定結束後儲存 Method file



Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

MS DRY NEBU CDL HEAT IG MS

LCReady MSDEMO/Ready

Instrument Parameters View Normal Advanced End Time: 5.000 min

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Cont

Positive Negative End Time: 5.000 min Use MS Program Edit...

MRM(+) Product Ion Scan(+) Precursor Ion Scan(+) Neutral Loss Scan(+) SIM(+) Scan(+)

Use CID Gas CID Gas Settings... Attenuation... Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
MRM	1	+	reserpine	609.30>195.00	
MRM	2	+	Sample_+ 500.00>250.00		
MRM	3	-	Sample_- 150.00>100.00		

Downloading instrument parameters...

MRM Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec Q1 Resolution: Unit Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event Survey Event Settings...

Dependent Event: Product Ion Scan Add

LC Ready MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flow	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	---		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

D: 29GB Free NUM



# 單次分析

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

LCReady MSDEMO/Ready

Instrument Parameters View Normal Advanced End Time: 5.01 min

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time: 5.000 min Use MS Program Edit...

MRM(+) Product Ion Scan(+) Precursor Ion Scan(+) Neutral Loss Scan(+) SIM(+) Scan(+)

Use CID Gas CID Gas Settings... Attenuation... Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
MRM	1	+	reserpine	609.30>195.00	
MRM	2	+	Sample_+ 500.00>250.00		
MRM	3	-	Sample_- 150.00>100.00		

MRM Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec Q1 Resolution: Unit Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event Survey Event Settings...

Dependent Event: Product Ion Scan Add

LC Ready MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

D: 29GB Free NUM



# 設定儲存Data位置名稱, Vial #, 注射體積

Single Run

Acquisition Information

Sample Name: Test

Sample ID: 001

Option...

Method File: C:\LabSolutions\Data\Analysis\_Method.lcm

Data File: Create into: D:\消防基金LCMS\_Data

Data1.lcd

Auto-Increment: 1, 2, ...

Report:

Data Comment: mw609

Sampler

Vial#: 1

Tray: 1

Injection Volume: 1 uL

Advanced >> OK Cancel Help

Single Run

Acquisition Information

Sample Name:

Sample ID:

Option...

Method File:
C:\LabSolutions\Data\Analysis\_Method.lcm

Data File:
Create into:
D:\消防基金LCMS\_Data

Data1.lcd

☐ Auto-Increment:
1, 2, ...

☐ Report:

Data Comment:

Sampler

Vial#:
1

Tray:
1

Injection Volume:
1
uL

Other Handlings

Tuning File
C:\LabSolutions\Data\20110808.lct

Background Data File:

Quantitative

Type:
Unknown

Calibration Level:
0

ISTD Amount #1:
1

Sample Amount:
1

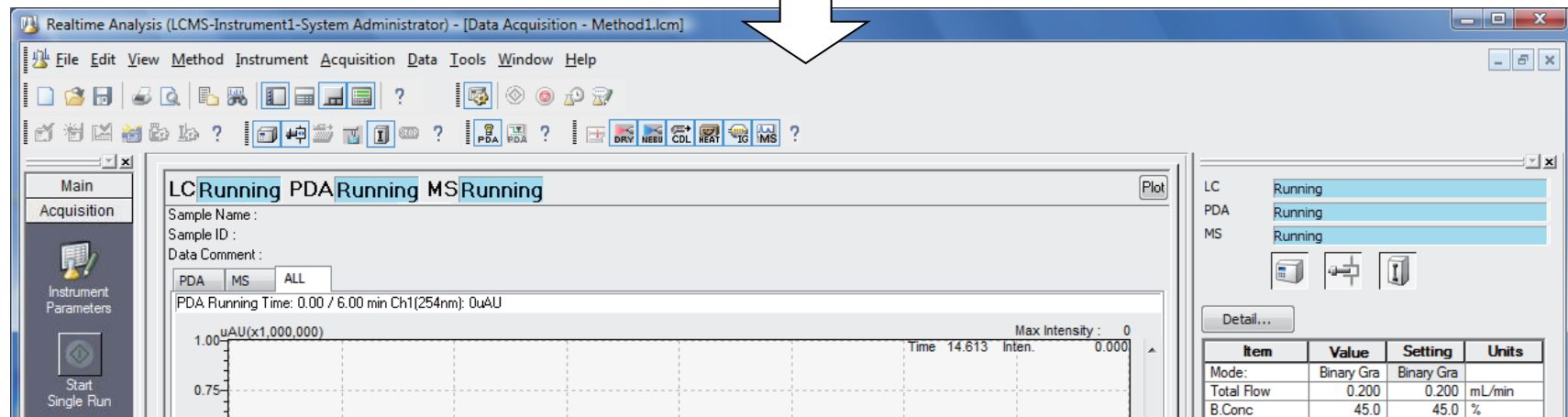
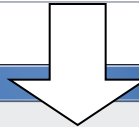
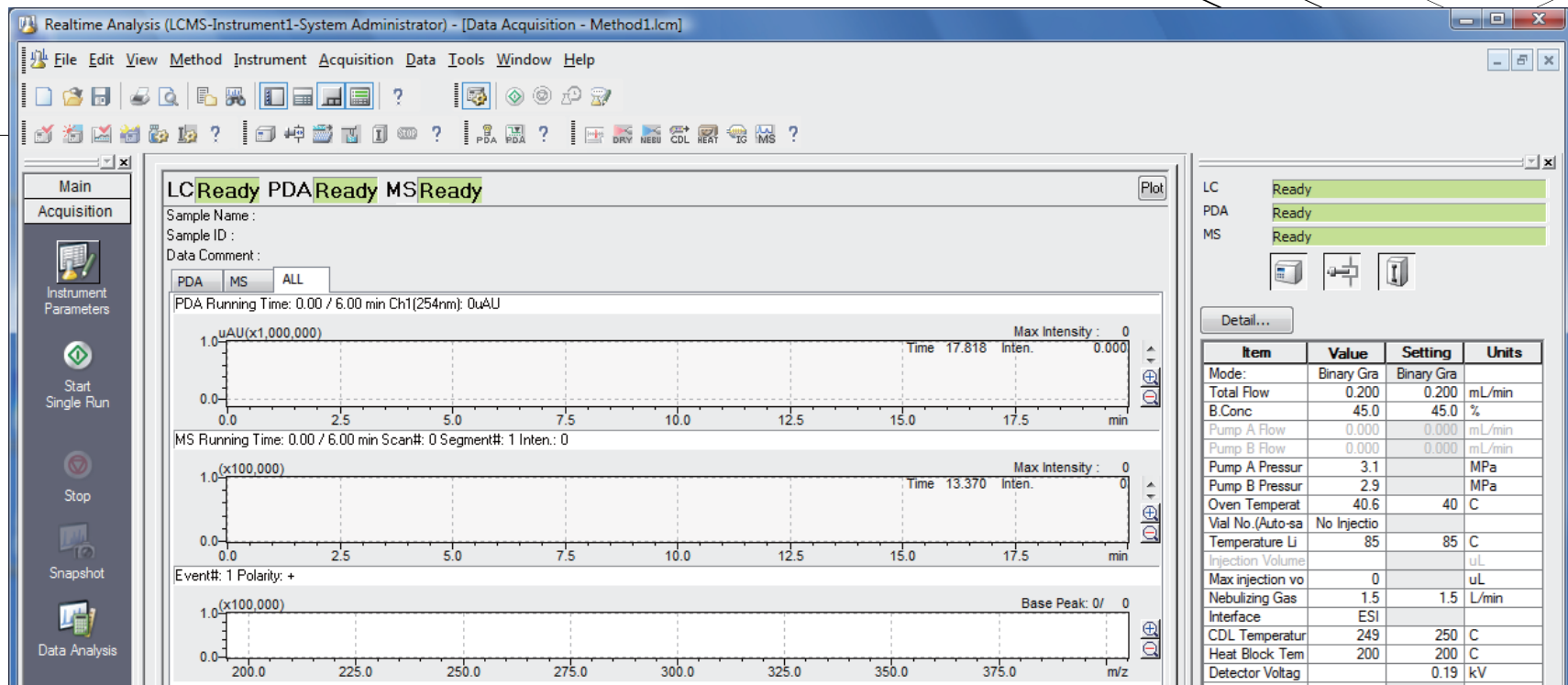
Dilution Factor:
1

Data Processing

☒ TIC Peak Integration
☐ Make Spectrum Process Table

☐ Library Search
☐ Quantitative

Advanced <<
OK
Cancel
Help



# 批次分析

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

MS Ready MS DEMO/Ready

Instrument Parameters View Normal Advanced End Time: 5.01 min Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time: 5.000 min Use MS Program Edit...

MRM(+) Product Ion Scan(+) Precursor Ion Scan(+) Neutral Loss Scan(+) SIM(+) Scan(+)

Use CID Gas CID Gas Settings... Attenuation... Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
MRM	1	+	reserpine	609.30>195.00	
MRM	2	+	Sample_+	500.00>250.00	
MRM	3	-	Sample_-	150.00>100.00	

MRM Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec Q1 Resolution: Unit Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event Survey Event Settings...

Dependent Event: Product Ion Scan Add

LC Ready MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	3.0	3.0	L/min
Heat Block Tempe	400	400	C
Detector Voltage		0.00	kV
Drying Gas Flow	15.0	15.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Data Acquisition MS Tuning

D: 29GB Free NUM

# 使用Table Easy Settings

Realtime Analysis (LCMS-8030-System Administrator) - [Realtime Batch - 001.lcb]

File Edit View Instrument Batch Tools Window Help

Undo Ctrl+Z  
Redo Ctrl+Y  
Fill Series  
Fill Down  
Cut Ctrl+X  
Copy Ctrl+C  
Paste Ctrl+V  
Copy Entire Table  
Clear Delete  
Select Row  
Select All Ctrl+A  
Copy Row  
Add Row  
Insert Row  
Paste Row  
Delete Row  
Table Easy Settings...  
Summary Report Settings...  
Open Data File...  
Edit Method File...  
Edit Report Format File...  
Batch Table Wizard...

Tray Name	Sample Name	Sample ID	Sample Type	Analysis Type
1	001		1:Standard:(I)	MIT MQT
1	002		1:Standard	MIT MQT
1	003		1:Standard	MIT MQT
1	004		1:Standard	MIT MQT
1	005		1:Standard	MIT MQT

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Batch Queue

Edit Table/Restart

Stop

Data Analysis

Data Acquis... MS Tuning Realtime Batch

Show table easy settings.

D: 29GB Free NUM

# Table Easy Settings

標準品

未知物

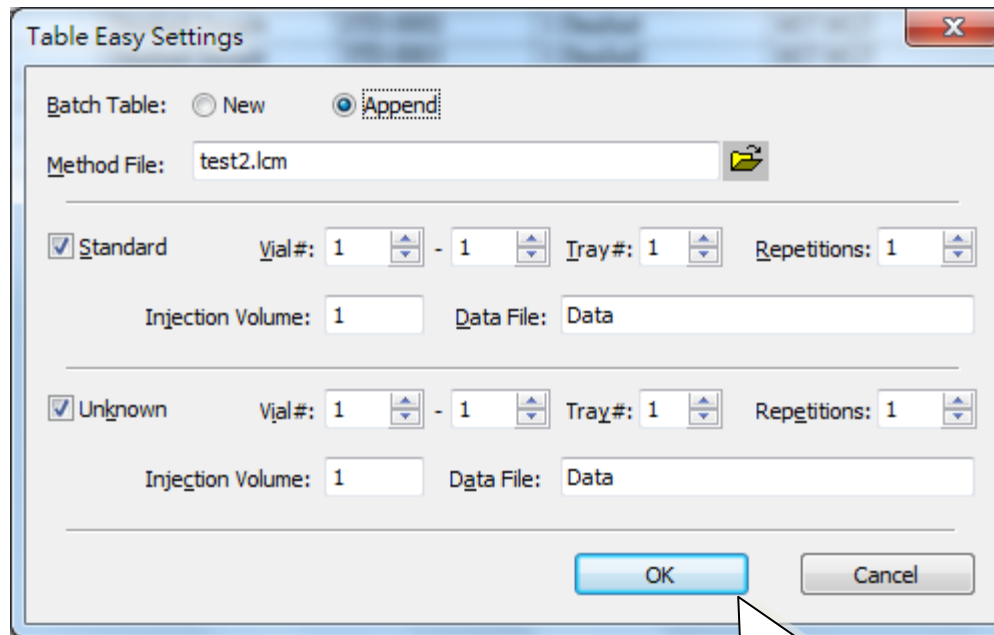


Table Easy Settings

Batch Table: ☐ New ☒ Append

Method File: test2.lcm

☒ Standard Vial#: 1 - 1 Tray#: 1 Repetitions: 1  
Injection Volume: 1 Data File: Data

☒ Unknown Vial#: 1 - 1 Tray#: 1 Repetitions: 1  
Injection Volume: 1 Data File: Data

OK Cancel

Realtime Analysis (LCMS-8030-System Administrator) - [Realtime Batch - 001.lcb]

# 檢查method, data 儲存設置

Main  
Acquisition  
Tuning  
Realtime Batch  
  
Method Development  
  
Settings  
  
Wizard  
  
Start Realtime Batch  
  
Batch Queue  
  
Edit Table/Restart  
  
Stop  
  
Data Analysis

Folder: D:\消防基金\LCMS\_Data

Analysis	Method File	Data File	Level#	Inj. Volume	Report Out
1	test2.lcm	Data001.lcd	1	1	
2	test2.lcm	Data002.lcd	1	1	
3	test2.lcm	Data003.lcd	1	1	
4	test2.lcm	Data004.lcd	1	1	
5	test2.lcm	Data005.lcd	1	1	

LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Data Acquis...
MS Tuning
Realtime Batch

D: 29GB Free NUM

# Easy setup function

Method File	Data File
Method1.lcm	Std01.lcd

Fill Series
Fill Down
Cut
Copy
Paste
Copy Entire Table



Method File	Data File
Method1.lcm	Std01.lcd
	Std02.lcd
	Std03.lcd
	Std04.lcd

Method File	Data File
Method1.lcm	

Fill Series
Fill Down
Cut
Copy
Paste
Copy Entire Table



Method File	Data File
Method1.lcm	Std01.lcd
Method1.lcm	Std02.lcd
Method1.lcm	Std03.lcd
Method1.lcm	Std04.lcd



# 精靈引導功能

Realtime Analysis (LCMS-8030-System Administrator) - [Realtime Batch - 001.lcb]

File Edit View Instrument Batch Tools Window Help

Folder: D:\防基金LCMS\_Data

Analysis	Method File	Data File	Level#	Inj. Volume	Report Out
1	test2.lcm	Data001.lcd	1	1	
2	test2.lcm	Data002.lcd	1	1	
3	test2.lcm	Data003.lcd	1	1	
4	test2.lcm	Data004.lcd	1	1	
5	test2.lcm	Data005.lcd	1	1	

LC Ready  
MS DEMO/Ready


Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL


Main  
Acquisition  
Tuning  
Realtime Batch  
Method Development  
Setting  
Wizard  
Start Realtime Batch  
Batch Queue  
Edit Table/Restart  
Stop  
Data Analysis

Data Acquis... MS Tuning Realtime Batch

D: 29GB Free NUM




Batch Table: ☐ New ☒ Append

Method File: C:\LabSolutions\Data\Analysis\_Method.lcm 

Injection Volume: 10 uL

MS Data Processing: ☐ Qualitative ☒ Quantitative

Select standard location in the sequence.

Number of Sample Groups: 1 

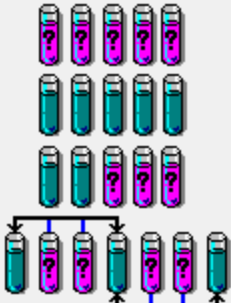
☐ Unknown Only  
☐ Standard Only  
☒ Standard & Unknown  
☐ Bracket Calibration

Bracketing: Overlap

☐ Use the same vial(s) in Bracket

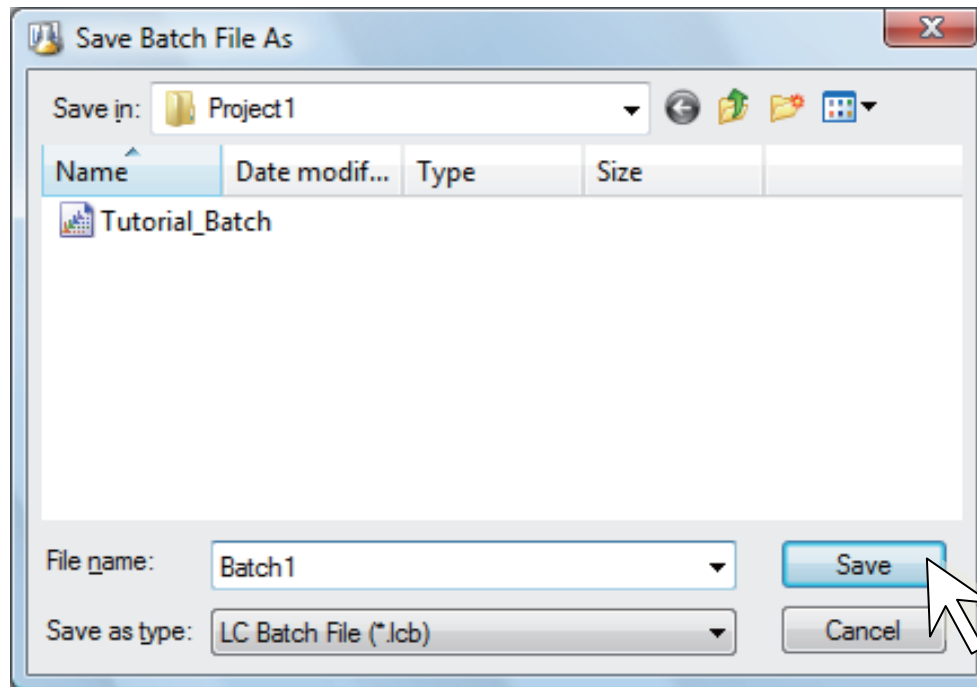
QA/QC Samples

☐ Insert QA/QC Samples



< 上一步(B)
下一步(N) >
取消
說明

# 儲存Batch file



# 執行批次分析

Realtime Analysis (LCMS-8030-System Administrator) - [Realtime Batch - 001.lcb]

File Edit View Instrument Batch Tools Window Help

Folder: D:\防基金LCMS\_Data

Analysis	Method File	Data File	Level#	Inj. Volume	Report Out
1	test2.lcm	Data001.lcd	1	1	<input type="checkbox"/>
2	test2.lcm	Data002.lcd	1	1	<input type="checkbox"/>
3	test2.lcm	Data003.lcd	1	1	<input type="checkbox"/>
4	test2.lcm	Data004.lcd	1	1	<input type="checkbox"/>
5	test2.lcm	Data005.lcd	1	1	<input type="checkbox"/>

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas Flo	1.5	1.5	L/min
Heat Block Tempe	300	300	C
Detector Voltage		0.00	kV
Drying Gas Flow	0.0	0.0	L/min
Interface	ESI		
Interface Current	0.0		uA
DL Temperature	250	250	C
IG Vacuum	2.1e-004		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	0	0	kPa
Mode	Isocratic f	Isocratic f	
Total Flow	0.0000	0.0000	mL/min
B.Conc	0.0	0.0	%
Pump A Flow	0.5000	0.5000	mL/min
Pump B Flow	0.5000	0.5000	mL/min
Pump A Pressure	0.0		MPa
Pump B Pressure	0.0		MPa
Pump A Degasser	0		kPa
Pump B Degasser	0		kPa
Oven Temperature	0.0	40	C
Temperature Limit	160	160	C
Vial No. (Autosamp)			
Injection Volume			uL

Main  
Acquisition  
Tuning  
Realtime Batch  
Method Development  
Settings  
Wizard  
Start Realtime Batch  
Batch Queue  
Edit Table/Restart  
Stop  
Data Analysis

Data Acquis... MS Tuning Realtime Batch

D: 29GB Free NUM

# 分析視窗設定

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

MS DRY NEU DL REAT IG IMS ?

Main Acquisition Instrument Parameters Start Single Run Stop Snapshot Data Analysis Optimization for Method Tuning Realtime Batch

**LCReady MSDEMO/Ready** Plot

Sample Name : Q1PreBias #1 Q1PreBias:-30.00to-10.00  
Sample ID :  
Data Comment :

LC MS ALL

MS Running Time: 0.00 / 5.00 min Scan#: 0 Inten.: 0

Time 0.902 Inten. Max Intensity : 0

1.0 (x100,000)

0.9

0.8

0.7

0.6

0.5

0.4

0.3

0.2

0.1

0.0

0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 min

Event#: 1 Polarity: + Mode: MRM

50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 m/z

Event#: 2 Polarity: + Mode: MRM

50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 m/z

LC Ready  
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas	3.0	3.0	L/min
Heat Block Te	400	400	C
Detector Volta		0.00	kV
Drying Gas Flo	15.0	15.0	L/min
Interface	ESI		
Interface Curre	0.0		uA
DL Temperatur	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressu	0.0		MPa
Pump B Pressu	0.0		MPa
Pump A Degas	0		kPa
Pump B Degas	0		kPa
Oven Temperat	0.0	40	C
Temperature Li	160	160	C
Vial No. (Autos			
Injection Volu			uL

D: 29GB Free NUM

# 分析時瀏覽圖譜設定

Realtime Analysis (LCMS-8030-System Administrator) - [Data Acquisition - test2.lcm]

File Edit View Method Instrument Acquisition Data Tools Window Help

Main

Acquisition

Instrument Parameters

Start Single Run

Stop

Snapshot

Data Analysis

Optimization for Method

Tuning

Realtime Batch

LCReady MSDEMO/Ready

Sample Name : Q1PreBias #1 Q1PreBias:-30.00to-10.00

Sample ID :

Data Comment :

LC MS ALL

MS Running Time: 0.00 / 5.00 min Scan#: 0 Inten.: 0

(x100,000)

Time 0.804 Inten.

Max Intensity : 0

滑鼠按右鍵

Initialize Zoom  
Base Shift  
Normalize  
Display Settings...  
Properties...

Event#: 1 Polarity: + Mode: MRM

50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 m/z

Event#: 2 Polarity: + Mode: MRM

50.0 75.0 100.0 125.0 150.0 175.0 200.0 225.0 m/z

Data Acquisition...

MS Tuning

Realtime B...

LC Ready

MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas	3.0	3.0	L/min
Heat Block Te	400	400	C
Detector Volta		0.00	kV
Drying Gas Flo	15.0	15.0	L/min
Interface	ESI		
Interface Curre	0.0		uA
DL Temperatur	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
Total Flow	0.0000	0.2000	mL/min
B.Conc	20.0	20.0	%
Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressu	0.0		MPa
Pump B Pressu	0.0		MPa
Pump A Degas	0		kPa
Pump B Degas	0		kPa
Oven Temperat	0.0	40	C
Temperature Li	160	160	C
Vial No. (Autos			
Injection Volu			uL

Setup the display parameters of the each graph area.

D: 29GB Free NUM

Display Settings

General
Status
MS
MS Spectrum
ALL

☐ Base Shift

Event#:
1
0.00
-
2.00
min

	Disp.	Occu	m/z	Factor
1	<input checked="" type="checkbox"/>	1	TIC	1.0
2	<input type="checkbox"/>	1	TIC	1.0

Intensity Range

Chromatogram:
☐ Auto scale

0
-
100000
Normalize

Vertical Size

Chromatogram
Spectrum

確定
取消
套用(A)
說明

Display Settings

General
Status
MS
MS Spectrum
ALL

☐ Base Shift

Event#:
1
0.00
-
2.00
min

	Disp.	Occu	m/z	Factor
1	<input checked="" type="checkbox"/>	1	TIC	1.0
2	<input type="checkbox"/>	1	609.30>195.00 609.30>78.00	1.0

Intensity Range

Chromatogram:
☐ Auto scale

0
-
100000
Normalize

Vertical Size

Chromatogram
Spectrum

確定

取消

套用(A)

說明



Display Settings

General
Status
MS
MS Spectrum
ALL

Range

Intensity:
☐ Auto scale

0
-
100000

m/z:
☒ All m/z Range

50
-
500

Spectrum Data

☒ Spectrum1
Event#:
0

☒ Spectrum2
Event#:
0

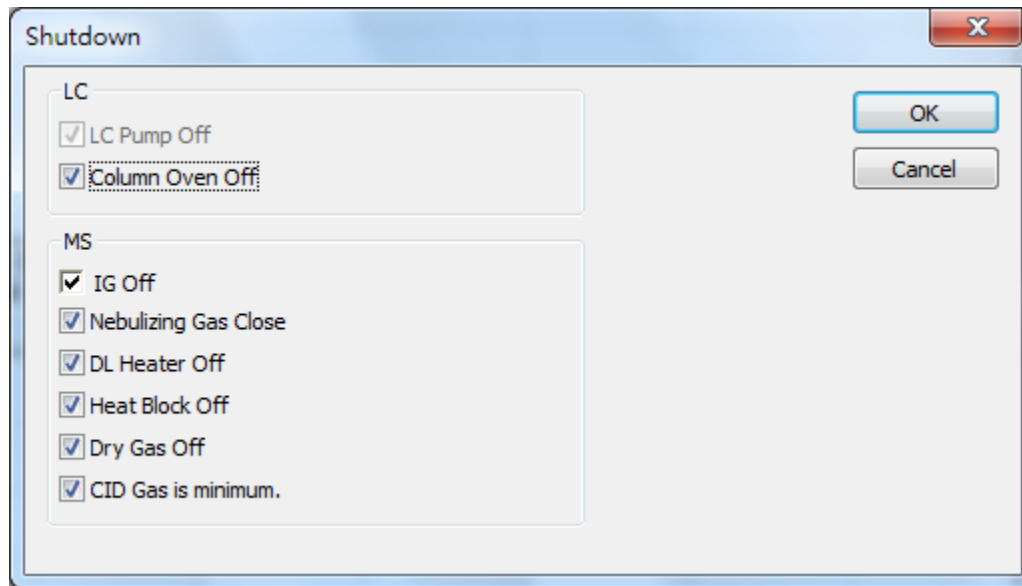
確定

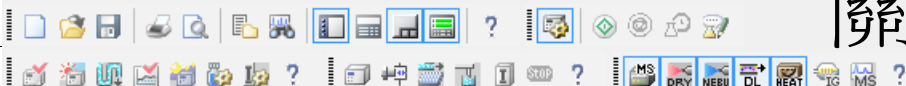
取消

套用(A)

說明

# 關閉軟體





關機

Main

System Check

Data Acquisition

Realtime Batch

Report Format

Calibration Curve

Batch Editor

Tuning

System Control

Acquisition

Tuning

Realtime Batch

LC Ready MS DEMO/Ready

Instrument Parameters View

Normal Advanced End Time: 5.01 min

Download

MS Interface Data Acquisition LC Time Prog. Pump Column Oven Controller Autosampler AutoPurge

Positive Negative End Time: 5.000 min Use MS Program Edit...

MRM(+) Product Ion Scan(+) Precursor Ion Scan(+) Neutral Loss Scan(+) SIM(+) Scan(+)

Use CID Gas CID Gas Settings... Attenuation... Loop Time...

Type	Event#	+/-	Compound Name	m/z	Time (0.000 min - 5.000 min)
MRM	1	+	reserpine	609.30>195.00	
MRM	2	+	Sample_+	500.00>250.00	
MRM	3	-	Sample_-	150.00>100.00	

MRM Acq. Time: 0 - 2 min Compound Name: reserpine

Ch	Precursor m/z	Product m/z	Dwell Time (msec)	CE
Ch1	609.30	195.00	100.0	-35.0
Ch2	609.30	78.00	100.0	-37.0
Ch3				
Ch4				

Event Time: 0.206 sec Q1 Resolution: Unit Advanced Settings...

Q3 Resolution: Unit

Use as Survey Event Survey Event Settings...

Dependent Event: Product Ion Scan Add

點選System Control

LC Ready

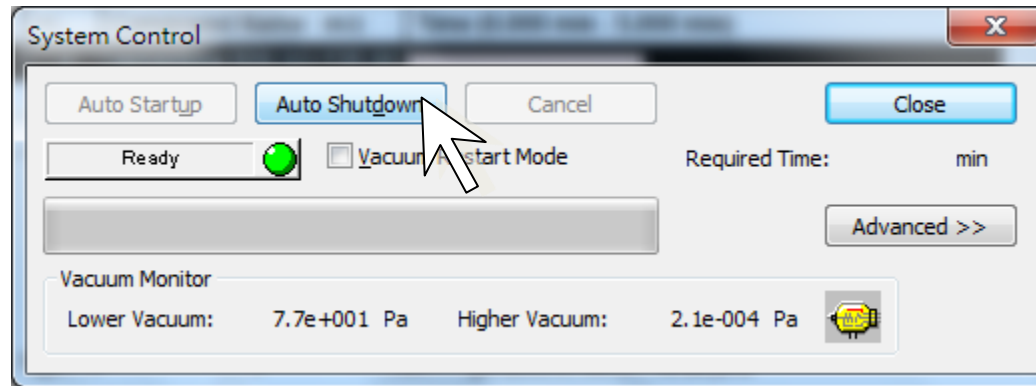
MS DEMO/Ready

Details...

Item	Value	Setting	Units
Nebulizing Gas	3.0	3.0	L/min
Heat Block Te	400	400	C
Detector Volta		0.00	kV
Drying Gas Flo	15.0	15.0	L/min
Interface	ESI		
Interface Curre	0.0		uA
DL Temperatur	250	250	C
IG Vacuum	----		Pa
PG Vacuum	7.7e+001		Pa
CID Gas	230	230	kPa
Mode	Binary gr	Binary gr	
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Pump A Flow	0.0000	0.0000	mL/min
Pump B Flow	0.0000	0.0000	mL/min
Pump A Pressu	0.0		MPa
Pump B Pressu	0.0		MPa
Pump A Degas	0		kPa
Pump B Degas	0		kPa
Oven Temperat	0.0	40	C
Temperature Li	160	160	C
Vial No. (Autos			
Injection Volu			uL

# Auto Shutdown

- 卸真空



- 關閉軟體, 關閉電腦
- 關閉MS電源, LC電源, 關閉氣體



END

# Thank You



層析/質譜、光學、環境、表面測定、金屬成份測定、原子力顯微鏡、X-RAY螢光/繞射等分析儀器



氣相層析用毛細式分離管柱，液相層析分離管柱，層析儀用微量注射針及管件接頭



麵糰物性、澱粉糊化測定及擠壓、磨粉加工、烘焙條件研究等測試儀器



光譜儀用石英、玻璃液槽



凝膠滲透層析儀  
液相層析分離管柱  
分離管填充劑



金屬成份分析分光儀器



發光光譜儀用標準試片



蛋白質結構研究設備



桌上型電氣透析裝置儀器



桌上型核磁共振光譜儀