



***Luminex***<sup>®</sup>

complexity simplified.

# **LX200 xPONENT**

## **4.2/4.3 简易操作说明**

## LX200 仪器准备试剂

- 70-75 % 异丙醇或 70-75 % 乙醇
- 蒸馏水
- 0.1 M NaOH
- 10 % 家用含氯消毒液
- Luminex® 100/200 Calibration Kit (REF. No. LX200-CAL-K25) 仪器配套校准试剂盒
- Luminex® 100/200 Performance Verification Kit (REF.No.LX200-CON-K25) 仪器配套验证试剂盒
- Sonicator bath 超声水槽/超声波清洗器

## LX200 仪器开机

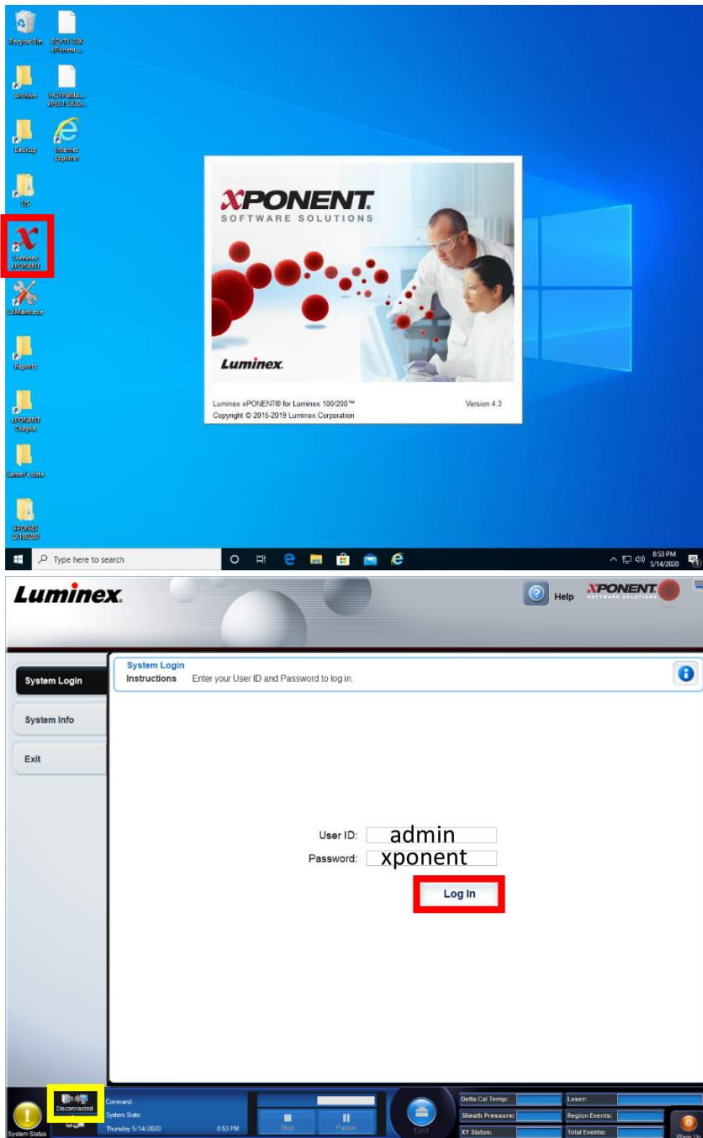
- 检查鞘液，废液瓶液面; 及时补充鞘液，倒掉废液
- 开启电源：LX200 分析仪，XY 平台，鞘液分配器，电脑

使用 xPONENT 软件控制仪器，运行实验

## LX200 xPONENT 4.2/4.3 简易操作说明

### 1) 登入软件：

- 点击 Luminex xPONENT
- 直接点击 Log In
- 需账号密码登入时，请输入 admin/xponent 后 Log In



确认仪器和电脑连接：显示 Connected

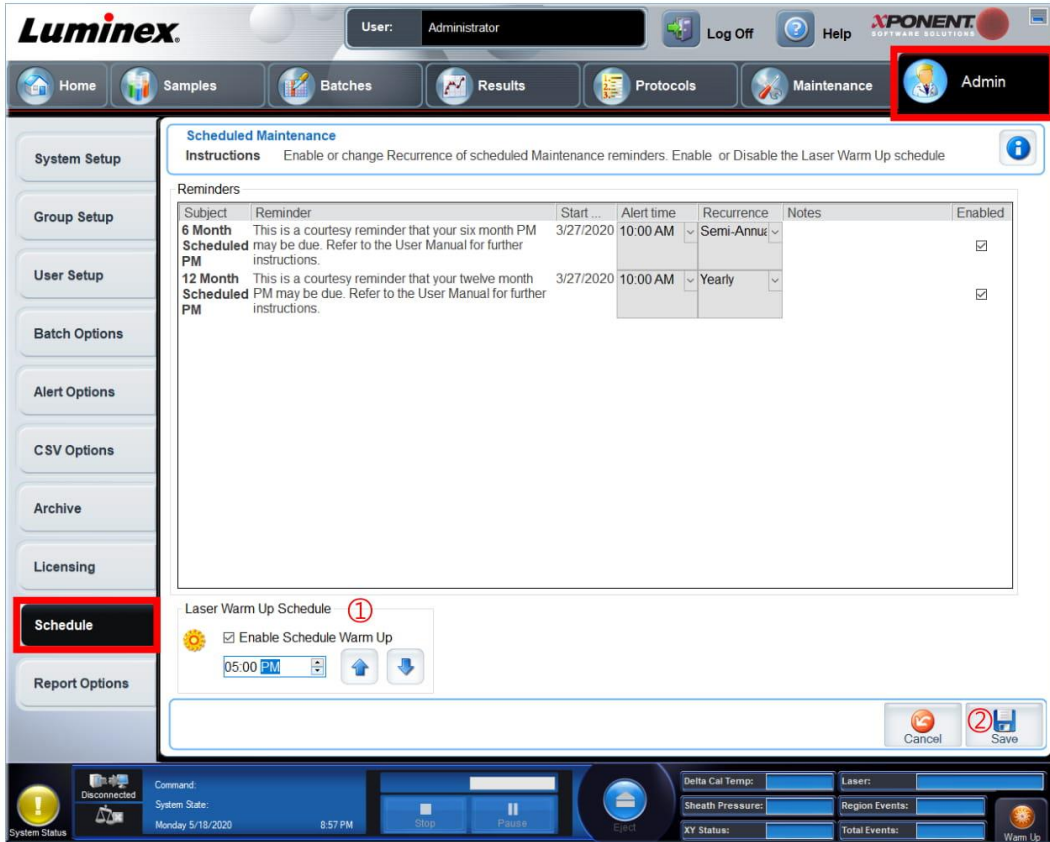
\*\*\*实验进行前请确认：

- 1) 鞘液和废液的水平
- 2) 预热激光 (30 分钟)
- 3) 使用白色维护板调整针高 (校准验证)
- 4) 把杂交使用小管放在 96 孔金属板调整针高

预定预热激光：Admin > Schedule 或 点击右下角的 

①勾选 Enabled Schedule Warm Up 并输入指定时间

②点击 Save



2) 调整针高：Maintenance > Probe & Heater

- ① 下拉点选维护板八连条/标准 96 孔板，点选任一位置调整针高 (选中处会出现绿色标记  )

校准验证：白色维护板放上八连条使用 2 片大垫片

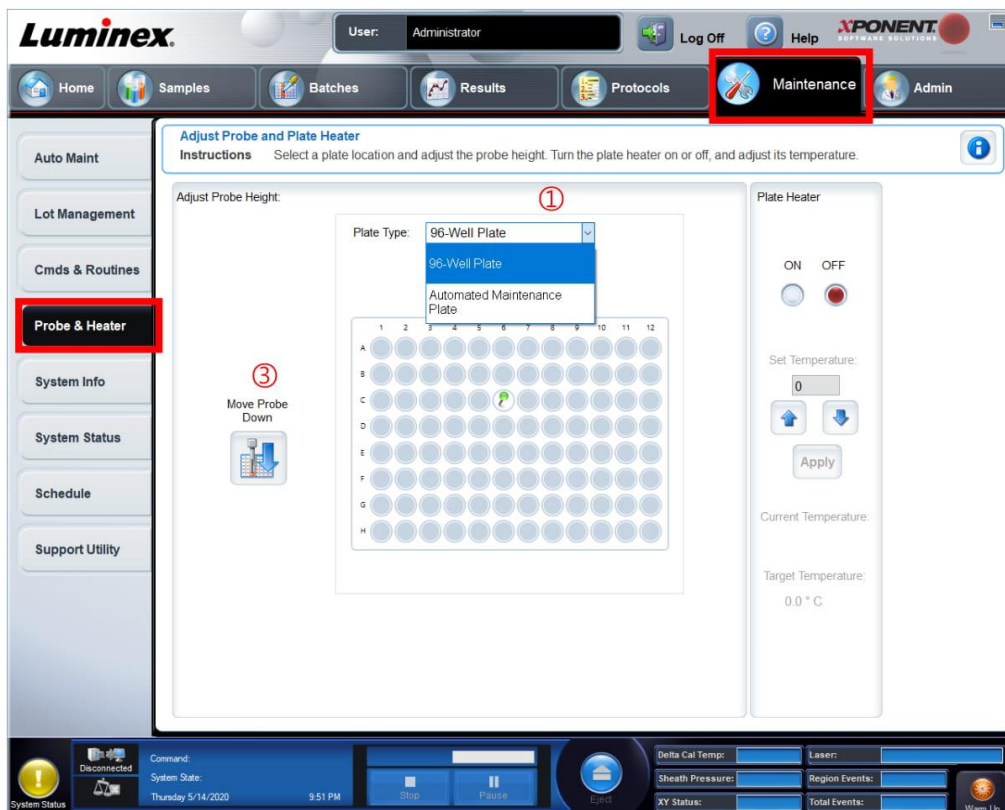
核酸实验：96 孔板架上黑色金属加热板，再放上锥形 (V 形) 板 (杂交使用小管)，管中放 1 颗珠子

蛋白实验：96 孔板架上酶免板，孔板中放 2 片大垫片

- ② 先拧开探针的螺丝

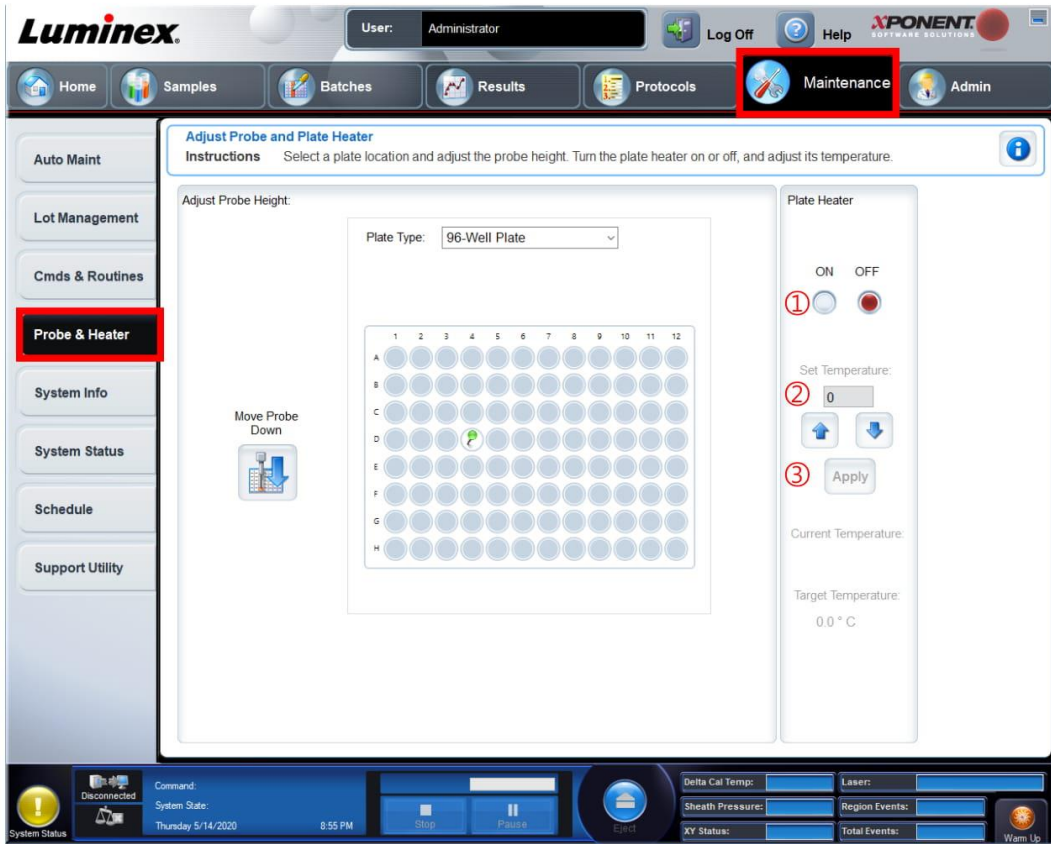
- ③ 点击 Move Probe Down，一手轻压探针顶部，一手拧紧探针螺丝 放八连条

- ④ 点击 Move Probe Up，再点击 Move Probe Down，确认板子没震动，表示探针的调整合适



3 ) 依照实验需求设定加热板温度 : Maintenance > Probe & Heater

- ① 点击 ON
- ② 输入温度
- ③ 点击 Apply



## 4) 校准验证 (每周一次) : Maintenance &gt; Auto Main

① 点击 Calibration Verification

② 试剂盒保存于 4 度，须确认试剂盒的批号是否与软件上的批号相同

③ 依照指示在八连杯加入试剂 (涡旋重悬均匀，每孔加入 5 滴试剂)  
依照指示在维护盘中加入酒精和水

④ 点击 Run

**Automated Maintenance - Calibration Verification**

Instructions Select the Automated Maintenance Option or Maintenance Command. Then, select the appropriate kit if applicable.

Automated Maintenance Options

① Calibration Verification Performance Verification Fluidics Prep System Shutdown

Command	Location	Reagent	Status	Information
Warmup	None	None	Pending	
Prime	None	None	Pending	
Alcohol Flush	1,E7	70% Alcohol	Pending	
Wash	1,B7	DI H2O	Pending	
Wash	1,B7	DI H2O	Pending	
CAL1	1,A10	CAL1	Pending	
MagCAL1	1,B10	MagCAL1	Pending	
CAL2	1,C10	CAL2	Pending	
Wash	1,B7	DI H2O	Pending	
CON1	1,A11	CON1	Pending	
MagCON1	1,B11	MagCON1	Pending	
CON2	1,C11	CON2	Pending	
Wash	1,B7	DI H2O	Pending	
Fluidics1	1,D11	Fluidics1	Pending	
Fluidics2	1,D11	Fluidics2	Pending	

Reagents

Calibration Kit Performance Verification Kit

② B76229 此处显示批号 B76232 此处显示批号

Legend

- Alcohol Flush
- Sanitize
- Wash
- Soak
- Drain
- CAL1
- MagCAL1
- CAL2
- CON1
- MagCON1
- CON2
- Fluidics1
- Fluidics2
- Multiple

③ Run

System Status: Disconnected, Command: System State, Thursday 5/14/2020 9:01 PM

Delta Cal Temp: Laser: Sheath Pressure: Region Events: XY Status: Total Events: Warm Up

5) 验证 ( 每天第一个实验前 ) : Maintenance > Auto Main

- ① 点击 Performance Verification
- ② 试剂盒保存于 4 度，须确认试剂盒的批号是否与软件上的批号相同
- ③ 依照指示在八连杯加入试剂 ( 涡旋重悬均匀，每孔加入 5 滴试剂 )  
依照指示在维护盘中加入酒精和水
- ④ 点击 Run

**Automated Maintenance - Performance Verification**

Instructions Select the Automated Maintenance Option or Maintenance Command. Then, select the appropriate kit if applicable.

Automated Maintenance Options

- Calibration Verification
- Performance Verification** (①)
- Fluidics Prep
- System Shutdown

Command	Location	Reagent	Status	Information
Warmup		None	Pending	
Prime		None	Pending	
Alcohol Flush	1,E7	70% Alcohol	Pending	
Wash	1,B7	DI H2O	Pending	
Wash	1,B7	DI H2O	Pending	
CON1	1,A11	CON1	Pending	
MagCON1	1,B11	MagCON1	Pending	
CON2	1,C11	CON2	Pending	
Wash	1,B7	DI H2O	Pending	
Fluidics1	1,D11	Fluidics1	Pending	
Fluidics2	1,E11	Fluidics2	Pending	
Wash	1,B7	DI H2O	Pending	

Reagents

Calibration Kit: B7622 (②) 此处显示批号

Performance Verification Kit: B7623 (②) 此处显示批号

Legend

- AF Alcohol Flush
- Sanitize
- Wash
- Soak
- Drain
- CAL1
- MagCAL1
- CAL2
- CON1
- MagCON1
- CON2
- Fluidics1
- Fluidics2
- Multiple

Vortex each reagent vial for 30 seconds. Place 5 drops of each reagent into the designated well. Fill the designated reservoirs with DI H2O, 70% Isopropanol, 10 - 20% household bleach, etc. if applicable to the chosen routine.

③ Run

6) 导入试剂盒批号：Maintenance > Lot Management

购买新的校准/验证试剂盒，若新购的批号与原来的批号不同，需要导入新试剂盒的批号

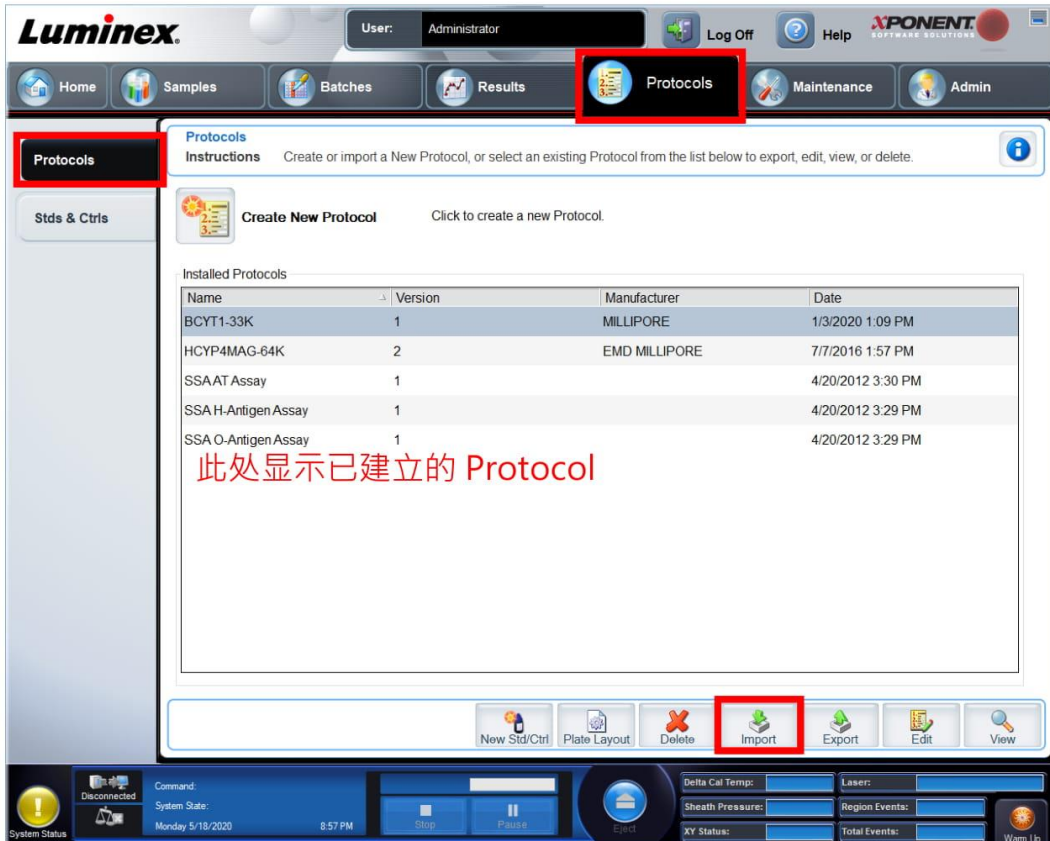
- ① 放入试剂盒中所附光盘
- ② 点击 Import Kit
- ③ 读取光盘
- ④ 双击 |x| 档案，自动导入批号



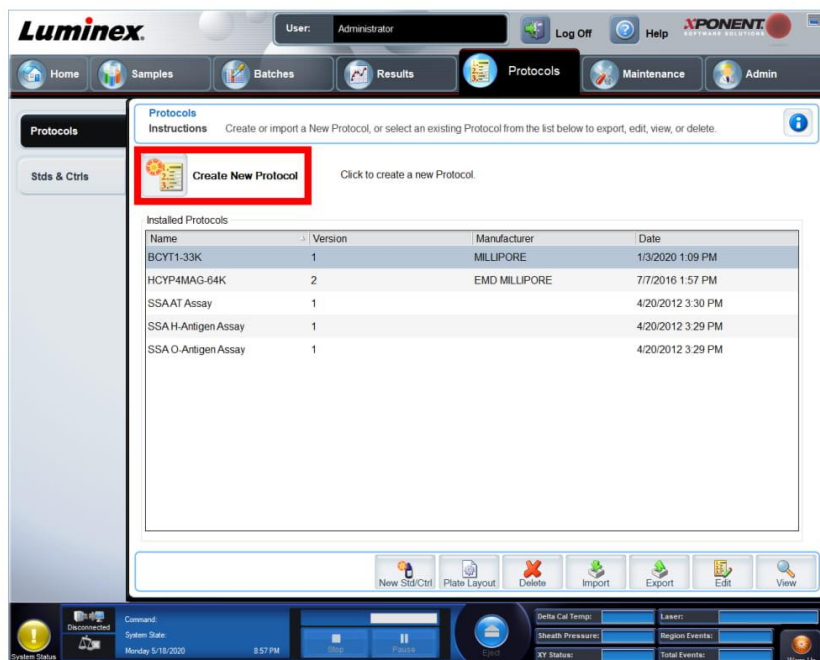
7) 实验方案 Protocols : Protocols > Protocols 可看到已建立的 Protocol

① 导入厂家提供或已创建的实验方案 :

点击 Import 后点选档案自动导入



② 创建新方案：点击 Create New Protocol  
依序输入参数后点击 Next



\*标本量

输入值应介于 20  $\mu$ L - 200  $\mu$ L  
默认值为 50  $\mu$ L

\*\*加热板温度

勾选 Enabled 以后用加热功能  
输入值输入值应介于 35°C - 60°C  
增量为 0.5

\*\*\*超时设置

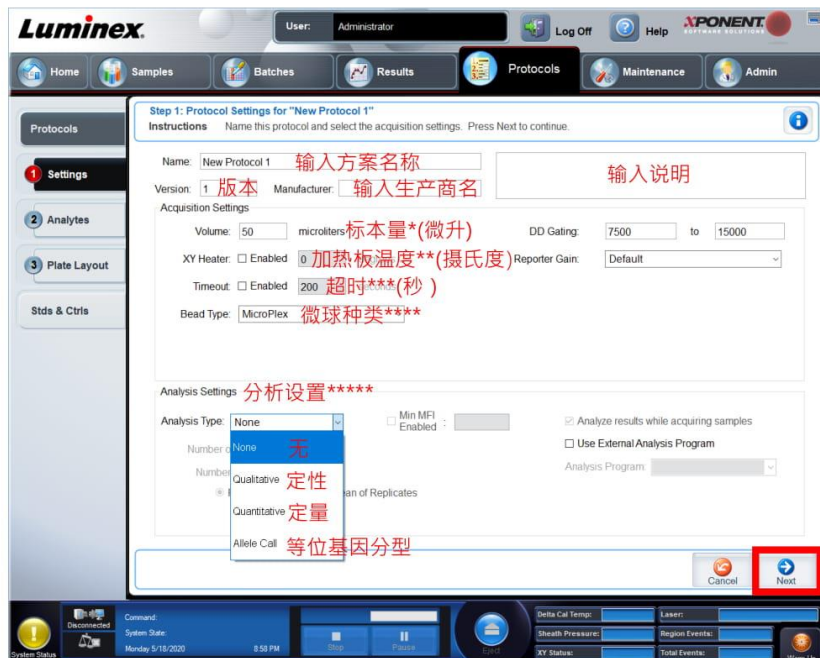
勾选 Enabled 以后用仪器在指定  
时间读取样本的截止时间

\*\*\*\*微球种类

依据实验需求选择塑料微球  
(MicroPlex) 或磁性微球 (MagPlex)

\*\*\*\*\*分析设置

依据实验需求选择无, 定性, 定量或  
等位基因分型



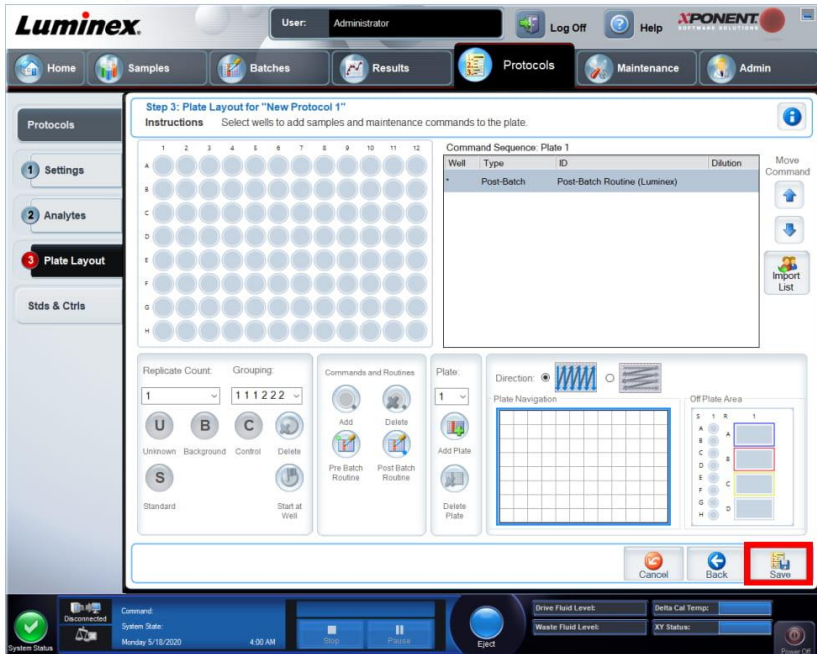
Analytes：依序输入微球编号，单位，所需数量后点击 Apply All



单位 (Units) 依据实验需求设置

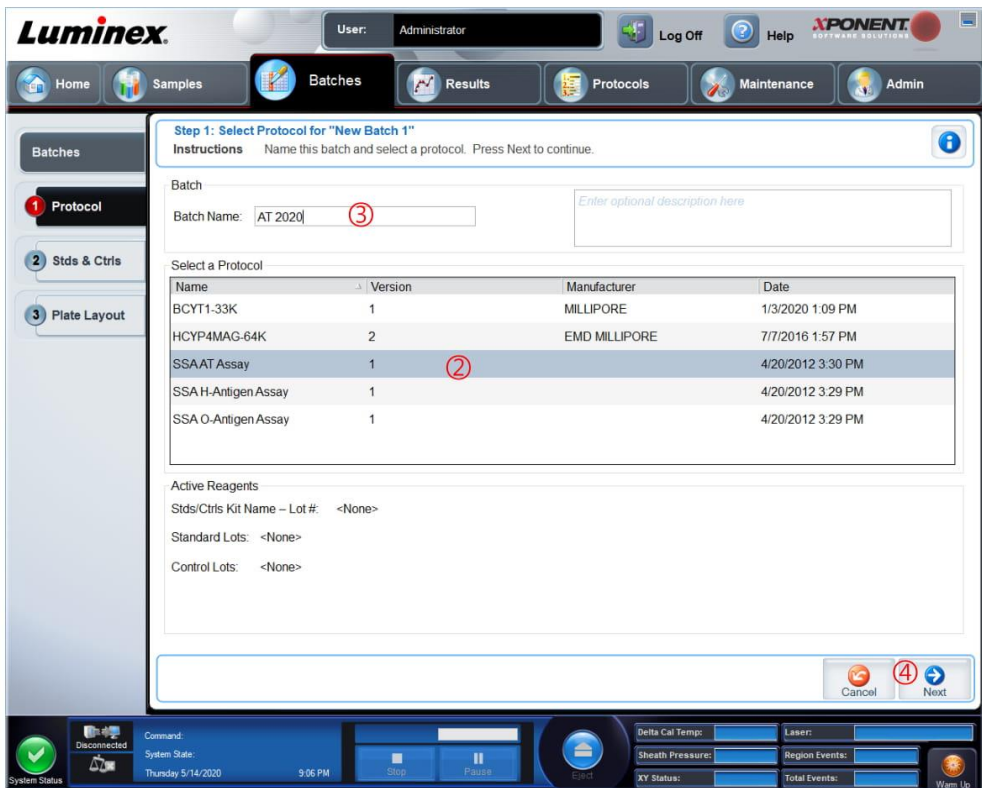
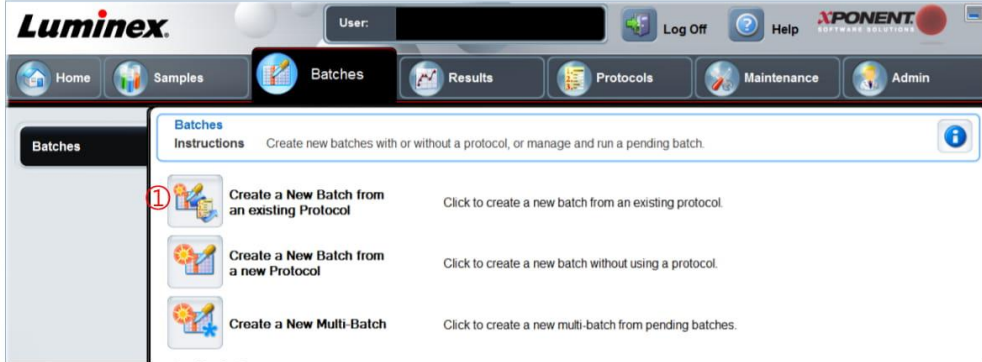
微球数 (Counts) 默认值为 100 颗

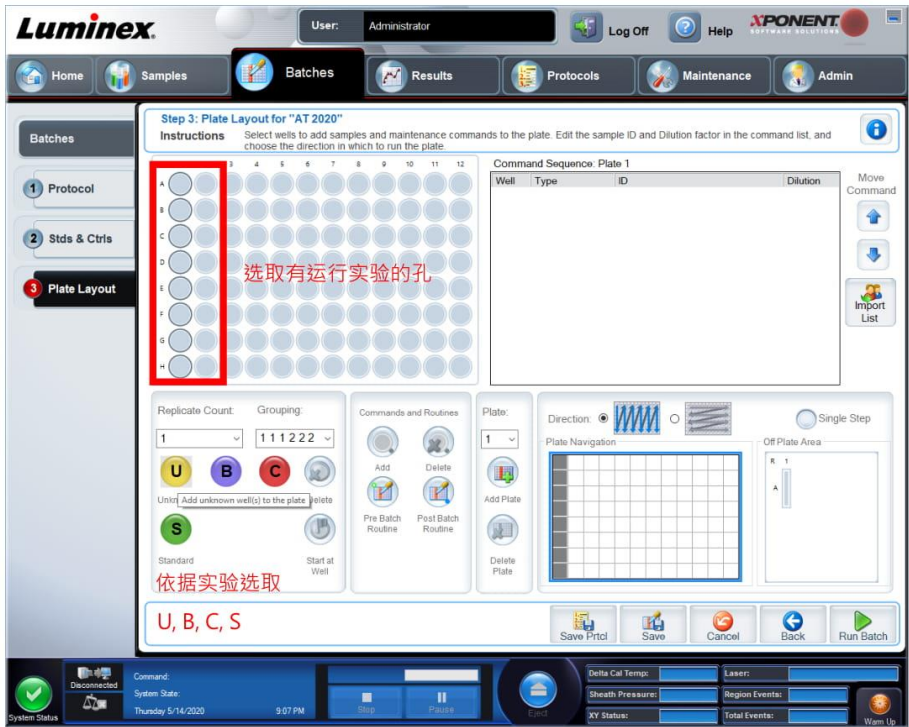
Plate Layout：建议不要在方案里设置 Plate layout，点击 Save 保存



8) 创建批次：Batches > Create a New Batch from an existing Protocol  
 每次实验上机前需先建好批次 (Batch)

- ① Create a New Batch from an existing Protocol
- ② 点选要运行的 Protocol
- ③ 可修改 Batch 名称
- ④ 点击 Next



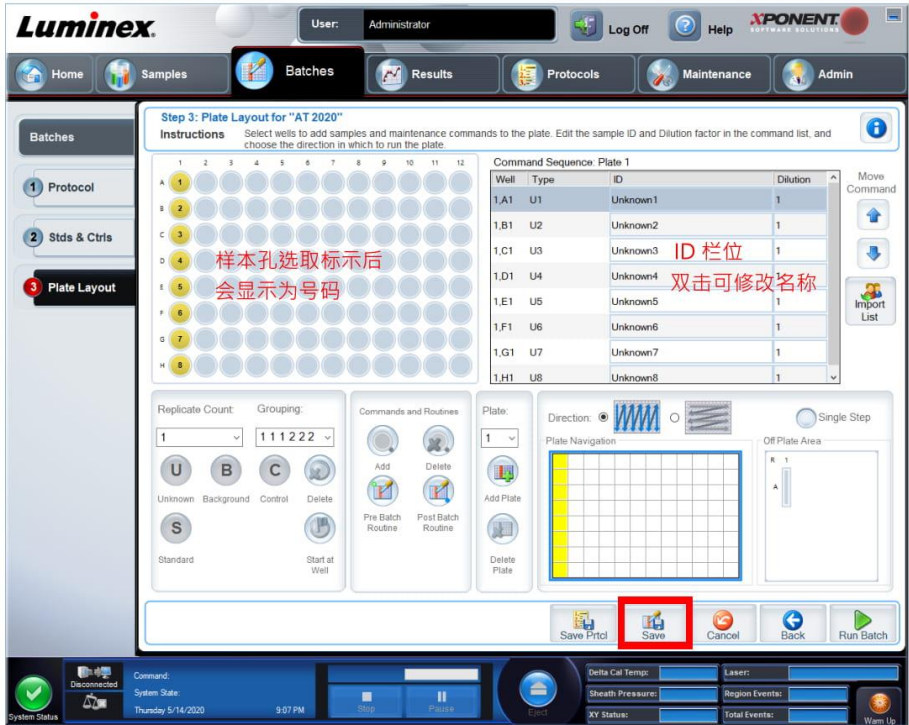


U=unknown 未知样本

B=blank 背景孔

C=control 对照品

S=standard 标准品

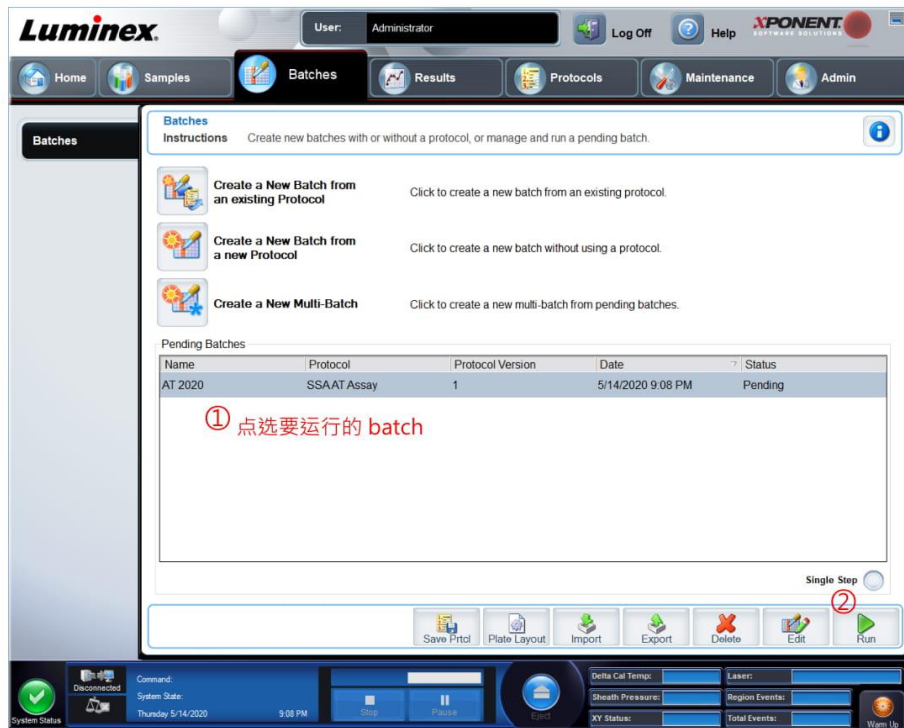


9 ) 运行批次 : Batches > Batches

回到 Batches 可看到已建立等待运行的批次 ( Pending Batches )

① 点选正确的批次

② 点击 Run 上机检测



10) 运行系统关机清洗：Maintenance > Auto Maint

- ① 点选 System Shutdown
- ② 依照指示在维护盘加入水和巴斯消毒液
- ③ 点击 Run

**Luminex** User: Administrator Log Off Help XONENT SOFTWARE SOLUTIONS

Home Samples Batches Results Protocols **Maintenance** Admin

**Auto Maint**

**Automated Maintenance - System Shutdown**

**Instructions** Select the Automated Maintenance Option or Maintenance Command. Then, select the appropriate kit if applicable.

Automated Maintenance Options

Calibration Verification Performance Verification Fluidics Prep **① System Shutdown**

Command	Location	Reagent	Status	Information
Sanitize	1,H7	10% Bleach	Pending	
Wash	1,B7	DI H2O	Pending	
Wash	1,B7	DI H2O	Pending	
Soak	1,B7	DI H2O	Pending	

Reagents

Calibration Kit: B76229 Performance Verification Kit: B76232

Legend

- Alcohol Flush
- Sanitize
- Wash
- Soak
- Drain
- CAL1
- MagCAL1
- CAL2
- CON1
- MagCON1
- CON2
- Fluidics1
- Fluidics2
- Multiple

Automated Maintenance Plate

DI H2O (B7) 水

70% EtOH (E7)

10% Bleach (H7)

Sa 巴斯消毒液

Report Import Kit **③ Run**

System Status: Disconnected Command: System State: Thursday 5/14/2020 9:08 PM Stop Pause Eject Delta Cal Temp: Laser: Sheath Pressure: Region Events: XY Status: Total Events: Warm Up

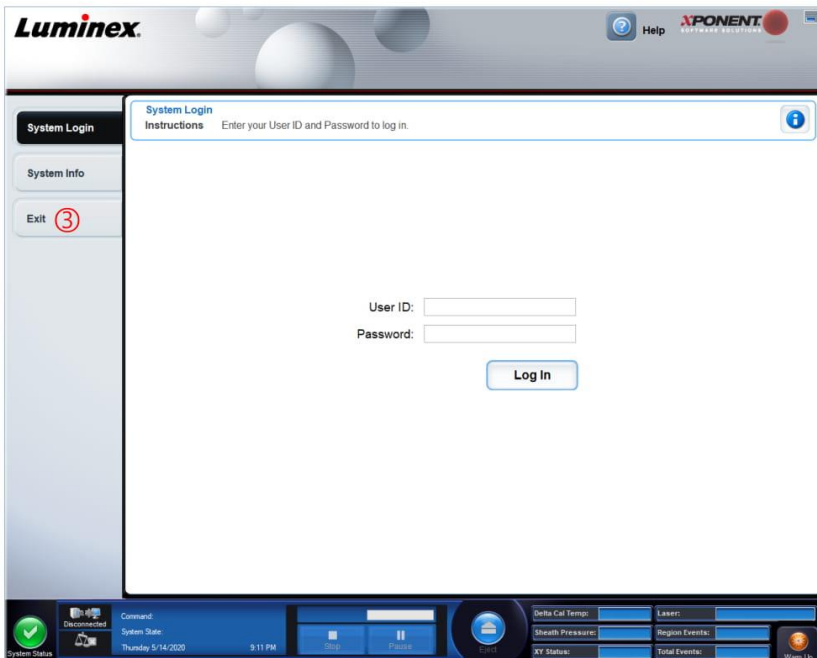
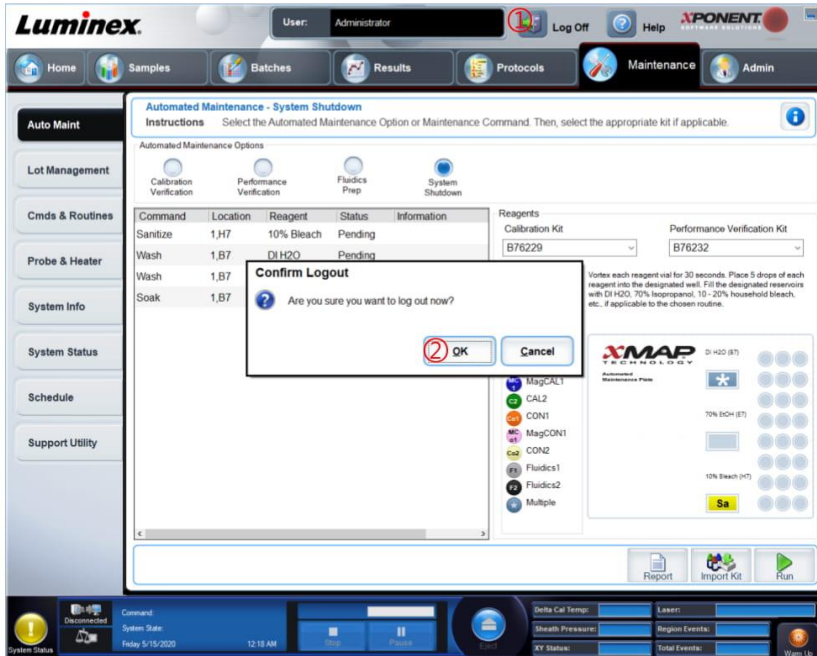
## 11) 关机

① 点选 Log Off

② 点击 OK

③ 点击 Exit 退出 xPONENT 软件后可关闭电源

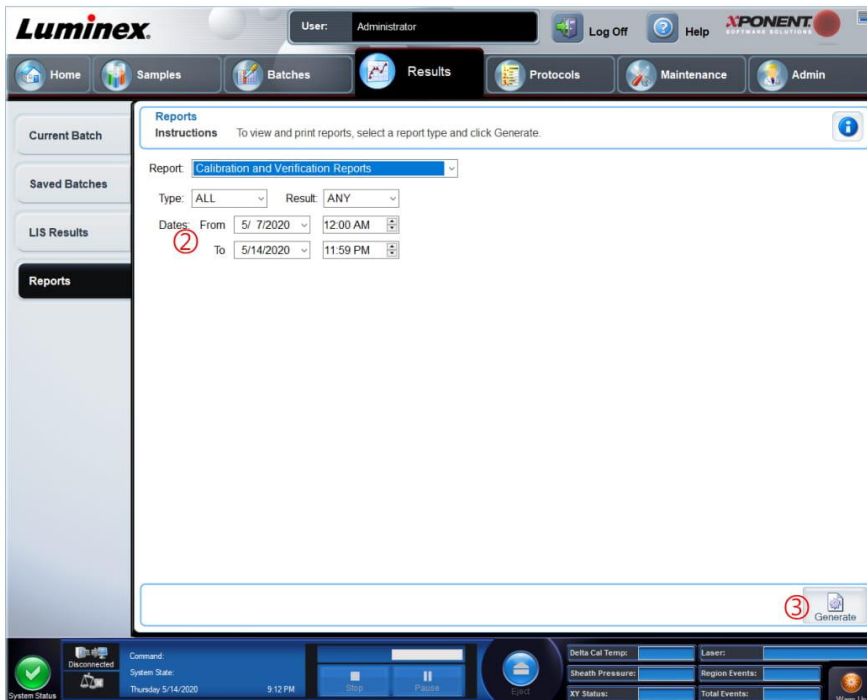
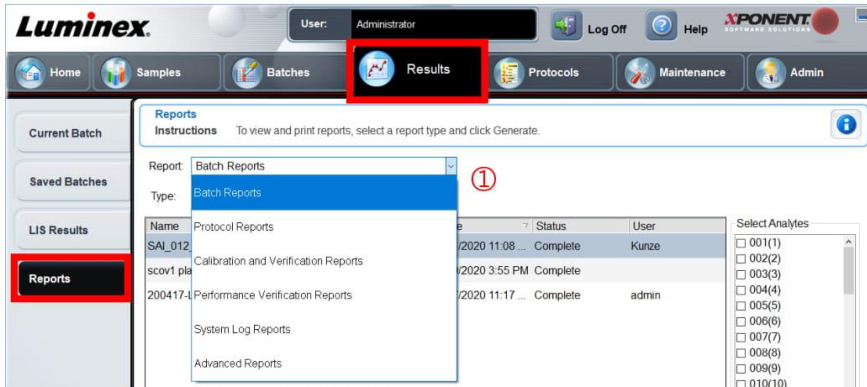
( 勿将液体留置于仪器内 )



## 12 ) 导出报告 : Results > Reports

所有实验或校准验证都可导出报告

- ① 下拉选单选取种类
- ② 选取时间
- ③ Generate 生成报告
- ④ Save 存出报告



## 13 ) 导出 Support Utility 文件 : Maintenance &gt; Support Utility

当仪器或是实验出现问题，技术支持人员将提示您导出 Support Utility 文件，以协助问题排查

① 确保仪器和电脑是连接 ( 显示 Connected )

② 若是与 Batch 相关的问题，请勾选 Include Batch Info，选择后再选有问题的 Batch ( 只能选一个 Batch )

若是其他方面的问题，可忽略此步骤

③ 点击 Support

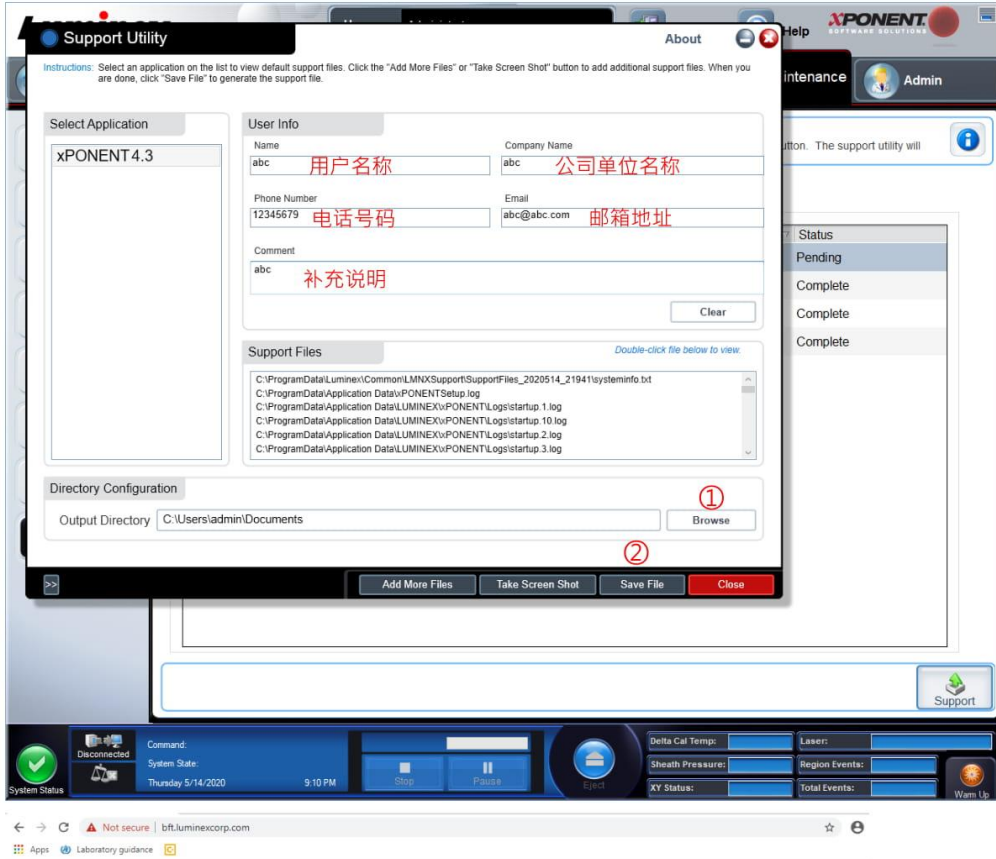
The screenshot displays the Luminox software interface. At the top, the user is logged in as 'Administrator'. The navigation menu includes Home, Samples, Batches, Results, Protocols, Maintenance, and Admin. The 'Maintenance' menu item is highlighted with a red box. Below the navigation menu, the 'Support Utility' page is active. It features a sidebar with options like Auto Maint, Lot Management, Ccmds & Routines, Probe & Heater, System Info, System Status, and Schedule. The 'Support Utility' option in the sidebar is highlighted with a red box. The main content area shows instructions for using the support utility, a checked checkbox for 'Include Batch Info' (circled in red), and a table of batches. The table has columns for Name, Protocol, Protocol Version, Date, and Status. The 'Support' button at the bottom right of the page is also highlighted with a red box. At the bottom of the interface, the system status bar shows 'Disconnected' with a red circle around it, and the system state is 'Thursday 5/14/2020 9:09 PM'.

Name	Protocol	Protocol Version	Date	Status
AT 2020	SSAAT Assay	1	5/14/2020 9:08 PM	Pending
SAI_012_210420	LS1A04012	1	4/21/2020 11:08 AM	Complete
scov1 plate1 IgG 202004...	20200416 COV2 DuPlex...	2	4/19/2020 3:55 PM	Complete
200417-LSMU	LSMUTR009	1	4/17/2020 11:17 AM	Complete

确认仪器和电脑连接 : 显示 Connected

填写信息，导出并发送 Support Utility 文件：

- ① 点击 Browse 选择导出路径
- ② 点击 Save File 导出 Support Utility 文件
- ③ 请使用 bft.luminexcorp.com 网页云端上传档案给技术人员



## Luminex Big File Transfer

Luminex customers, employees or otherwise affiliated may upload files that are too large to send via e-mail using the following form.

Your Name:

Your E-mail:

E-mail To:

点击 Add Files 加入档案 · Upload All 上传资料

8H31_E3500_V017.010.260_0_online.zip	389.24 MB	<input type="button" value="Upload"/>	<input type="button" value="Cancel"/>
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### Notes

- Either you or the recipient must have an "@luminexcorp.com" email address.
- Multiple recipients should be separated with either semi-colons or commas.
- A download link for the file(s) will be emailed to you and the recipient(s).
- The download links will expire after 14 days.
- You may drag & drop files from your desktop onto this webpage with most browsers.

若有任何疑问，请联络 400-996-2655



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