

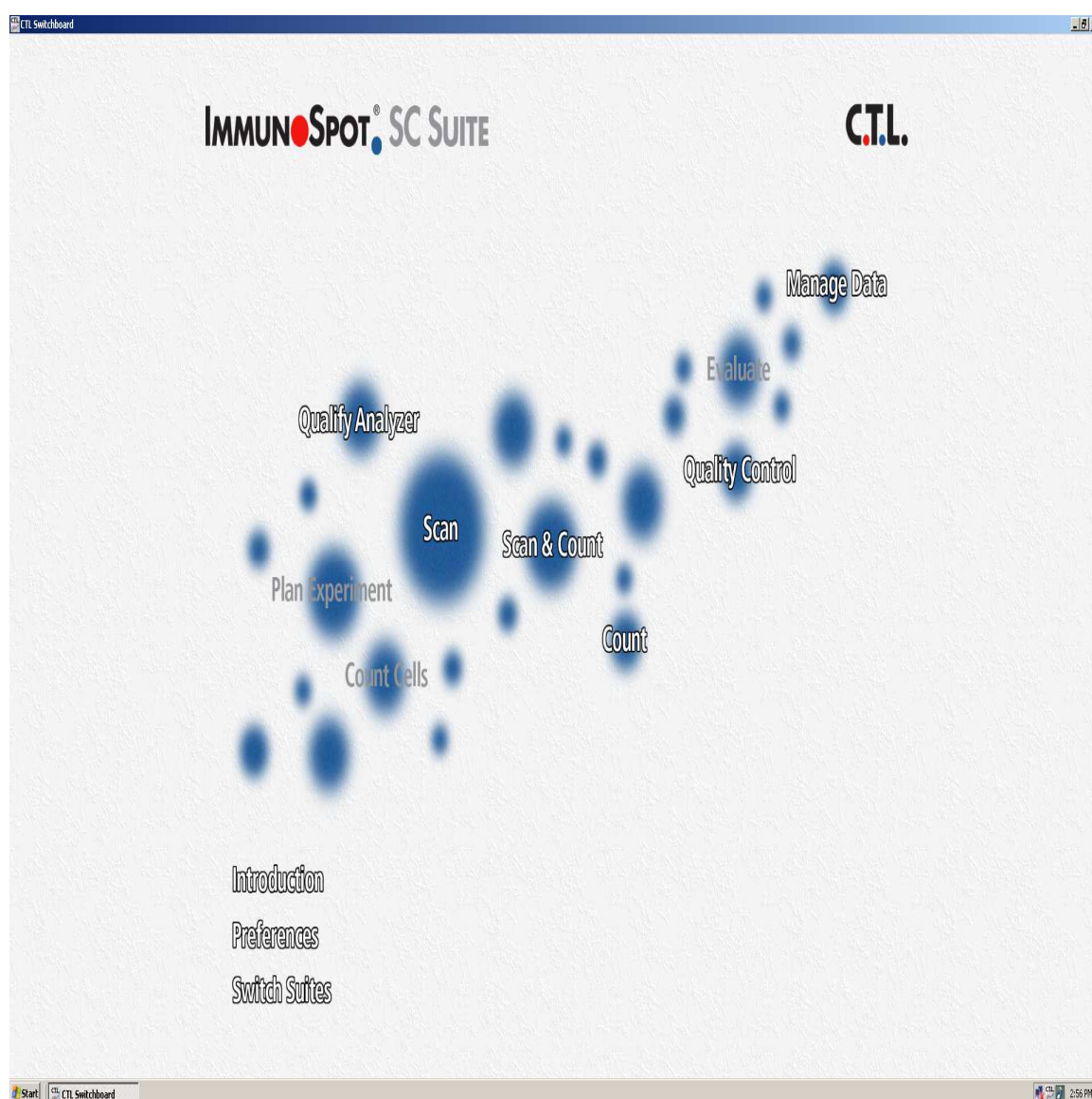


CTL ImmunoSpot Macro

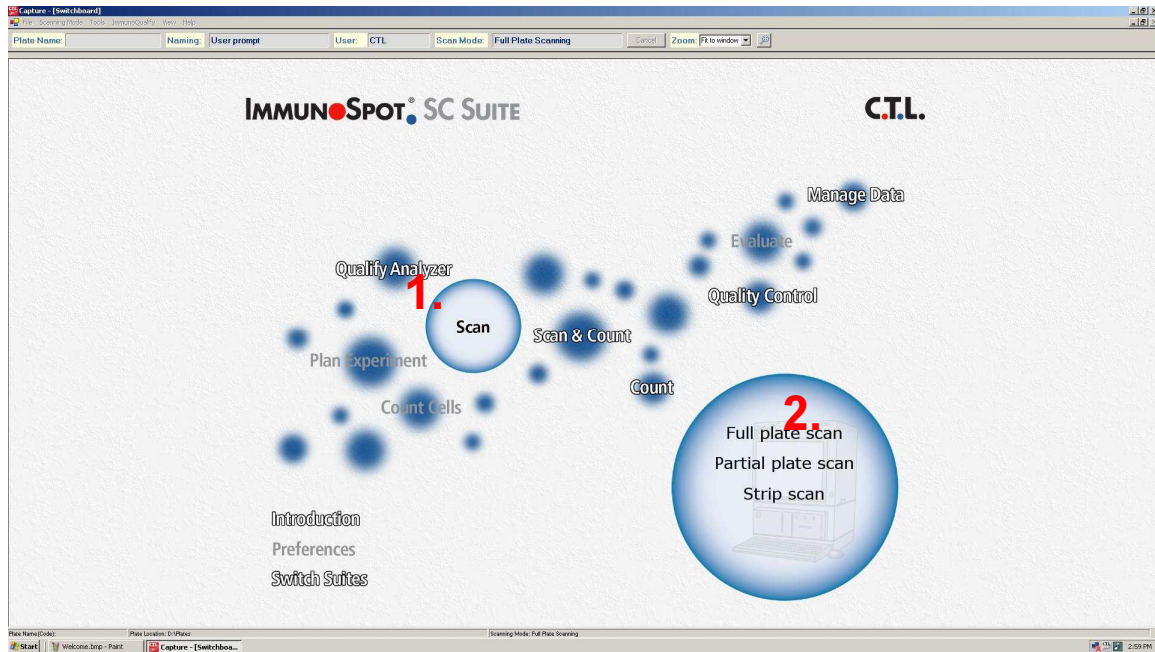
中文操作手冊

尚博生物科技有限公司

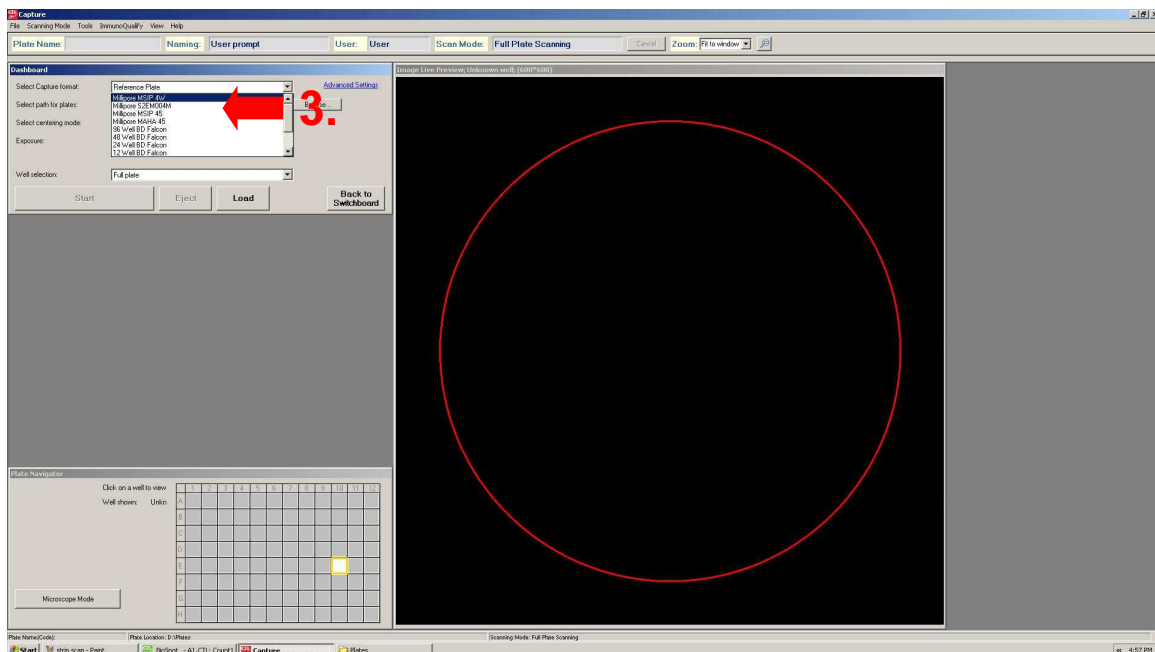
進入系統後畫面將自動跳出，亦可點選桌面 Switchboard圖示



影像擷取

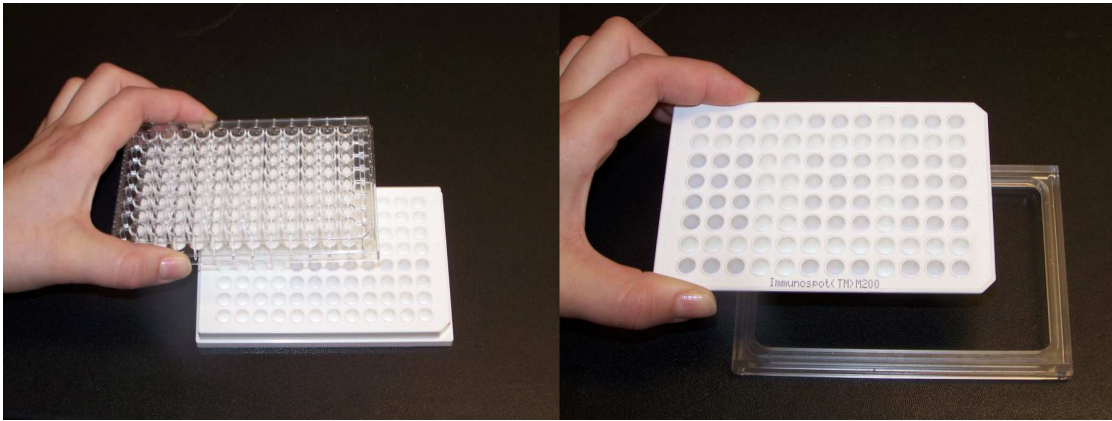


1. 選擇 Scan 模式
2. 選擇要整盤、部分或Strip

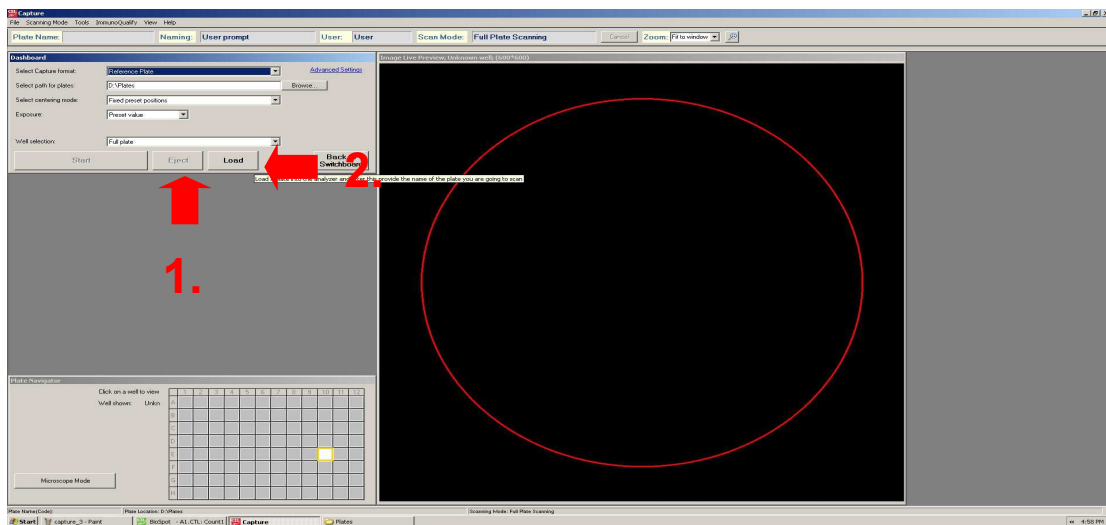


3. 按下 Dashboard，選擇你使用的盤式類型，每個盤子的側邊皆有產品編號，請依照標識選擇

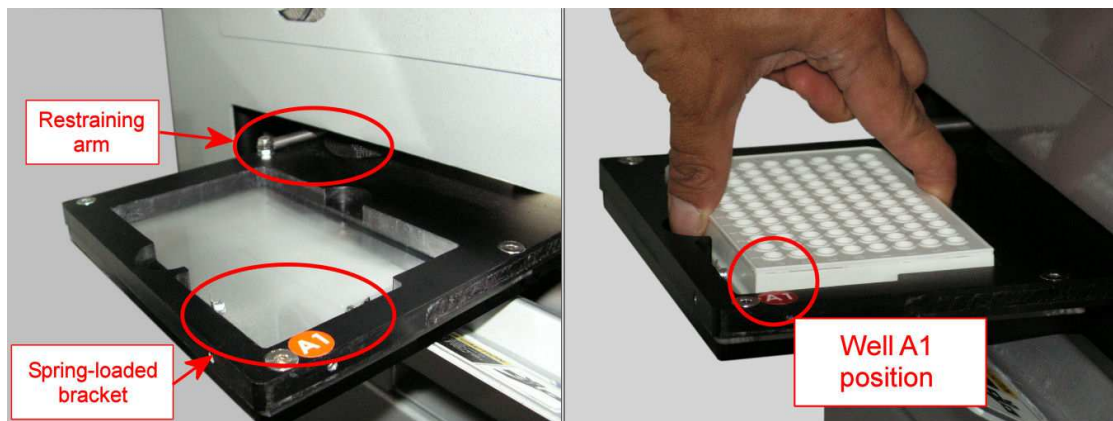
影像擷取



左圖盤式，請直接放上托盤。右圖盤式，請放在Holder。

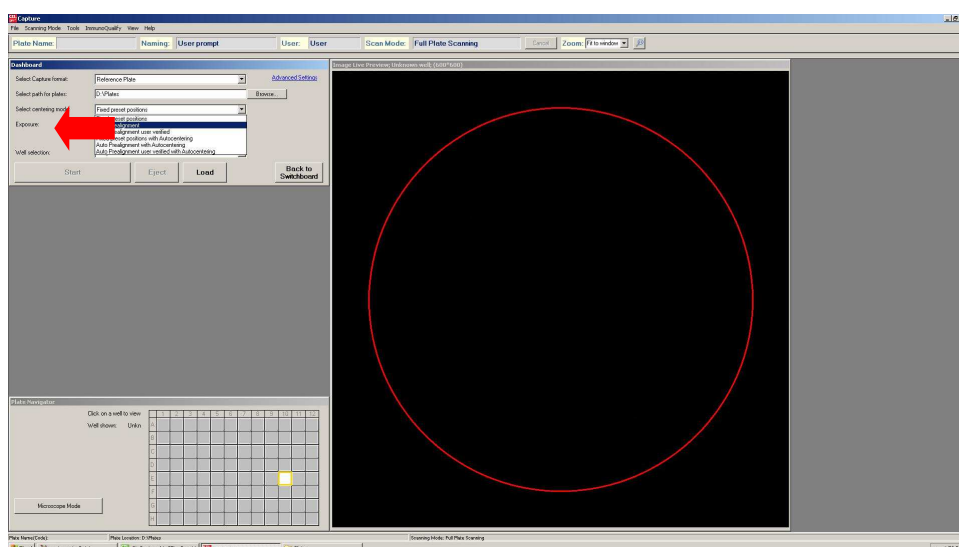


Eject 將托盤退出，Load 收回托盤

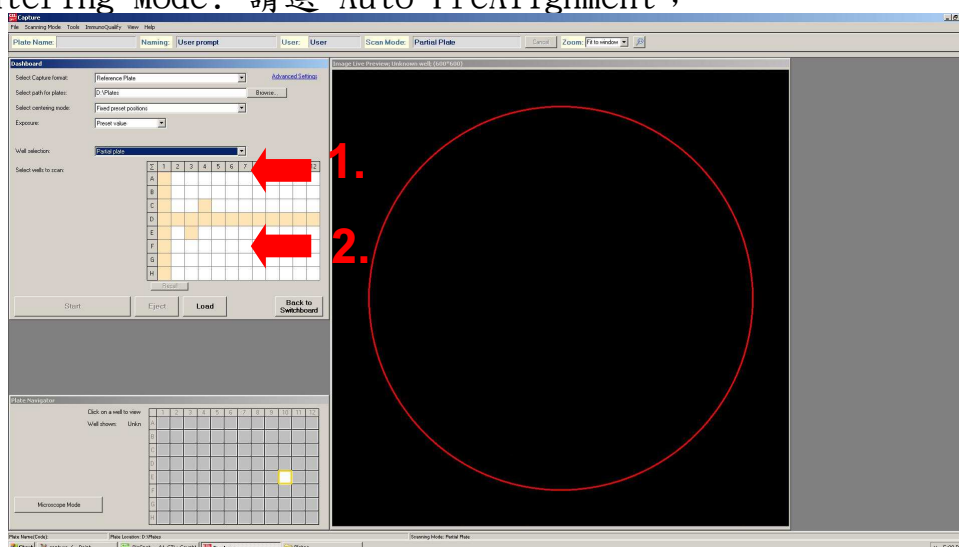


請將A1well 放在相對應的位置

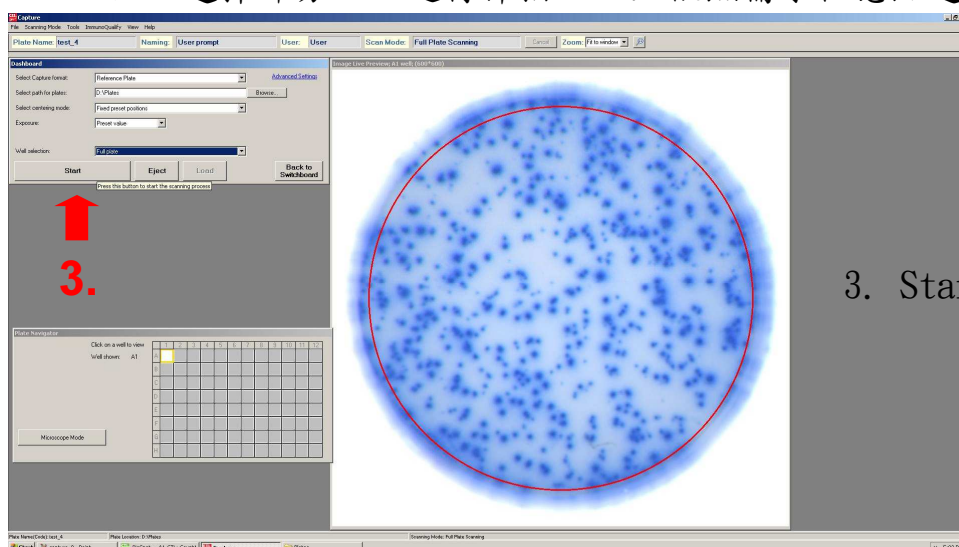
影像擷取



Select Centering Mode: 請選 Auto-PreAlignment;

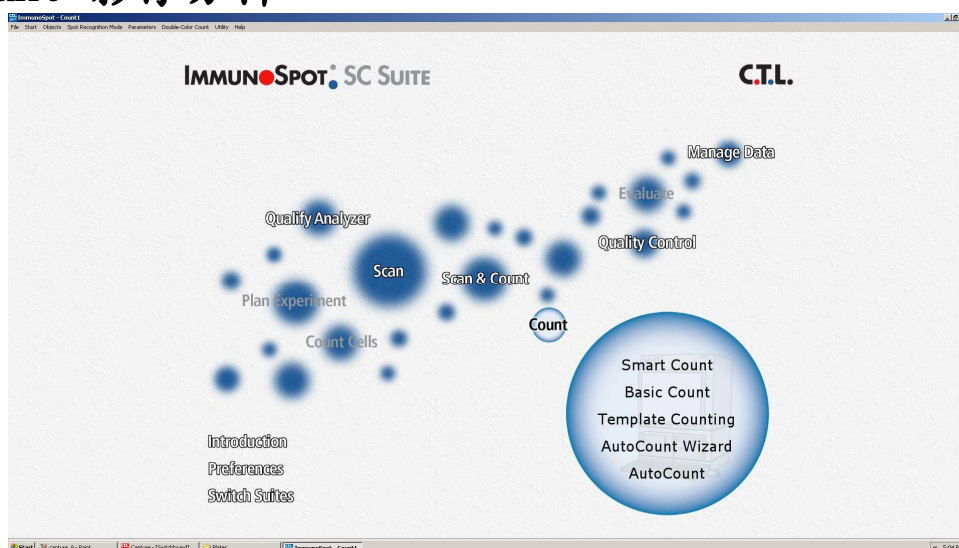


1. Partial scan: 只選擇部分well進行掃描 2. 依照需求任意點選要掃描的位置

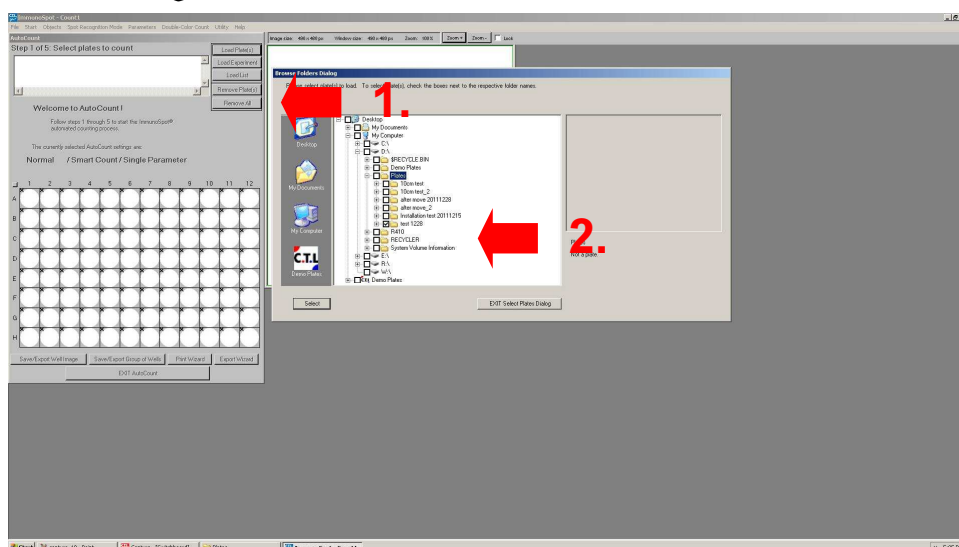


3. Start 開始掃描

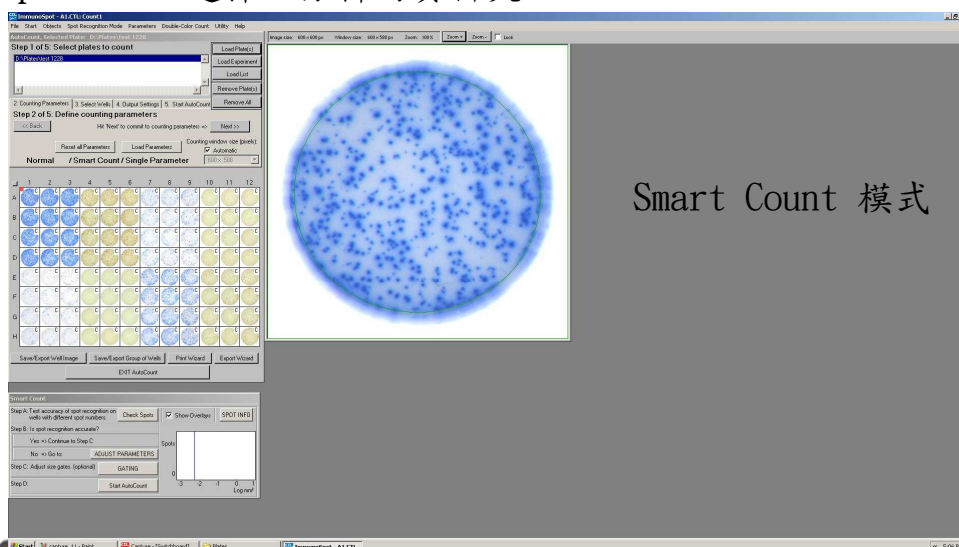
Smart Count 影像分析



回到Switchboard 點選 Count/ Smart Count



1. 選 Load plate 2. 選擇欲分析的資料夾



Smart Count 影像分析



Smart Count

Step A: Test accuracy of spot recognition on wells with different spot numbers. ☒ Show Overlays

Step B: Is spot recognition accurate?

Yes => Continue to Step C

No => Go to: **1.**

Step C: Adjust size gates. (optional)

Step D:

Spots

Log mm²

點擊1. 展開可調整之參數

Smart Count, Adjust Parameters

PREPROCESSING

Diffuse Processing:

Large

Small

Normal

Large

Largest

Background Balance

40

'Fiber' Removal

COUNT

Spot Separation:

1

Overdeveloped Area: Active

Settings

Count

Show Spot Flags

Show Overlays

100 Counted Area (%)

Normalize counts

Diam. at 100%: 6.200mm (actual)

GATING

BACK

Diffuse Processing: 依照實驗結果選擇適當的斑點大小

Background Balance: 請維持原始設定

Spot Separation: 數值越大，越容易將相鄰的兩個點辨識為一個

Fiber Removal: 自動移除毛髮或絲狀物

Counted Area: 若well周邊有濃厚色塊干擾，可減少此數值

Count: 依據目前設定參數進行計數

Automated Gating

Step A: Select positive antigen wells. Step C: Auto-adjust gates.

Step B: Select negative control wells. (optional)

NEGATIVE

Spots

Log mm²

Count

POSITIVE

Spots

Log mm²

Count

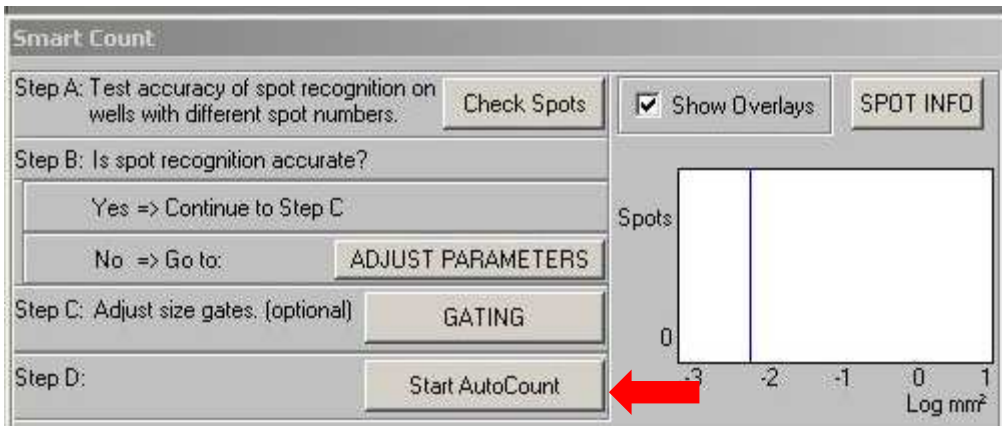
Manual Gating: Min. 0.0072 mm² Max. 13.8903 mm²

MIN/MAX SAMPLING

BACK

設定大小範圍，
Min 最小值，
Max 最大值，
若有Positive 和
Negative 可讓軟體
自動設定，請遵循
Step A to Step C

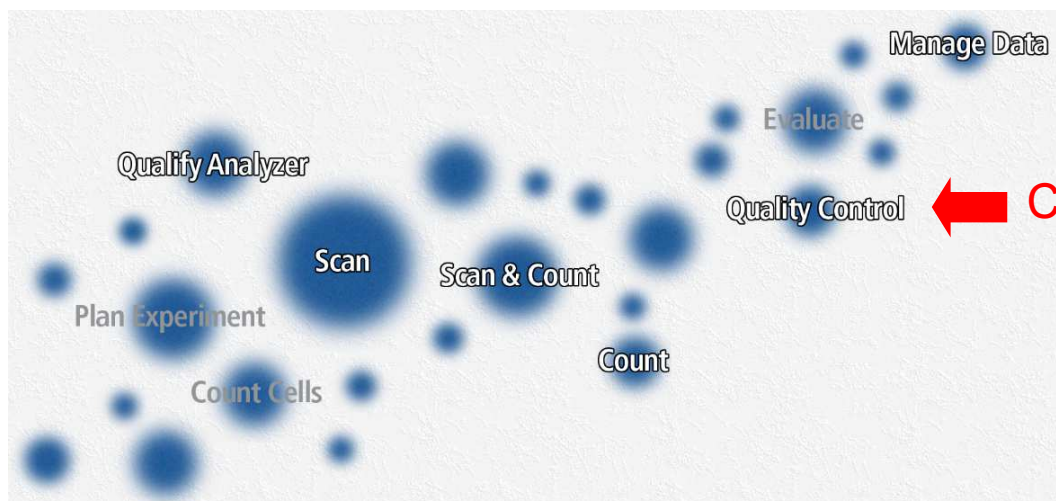
Smart Count 影像分析



每個well 點擊兩下，便可知道分析結果，若可接受，即可按下 Start AutoCount 讓軟體自動分析

分析後，軟體會進行輸出掃描圖檔和分析檔案，
內含Excel 方便使用者進行更多統計運算。
基本上，您已完成分析工作；
若需要細部調整請參閱 Quality Control 手冊

Quality Control 参数设定



Quality Control Project

Please select plates to be subjected to quality control.

Select any plate in the list and click on "Start QC" to begin the quality control process.

Buttons: Add Plate(s) **Click it**, Add Experiment, Add List, Search Plates

Plate Name	Status

Browse Folders Dialog

Please select plate(s) to load. To select plate(s), check the boxes next to the respective folder names.

D:\R410

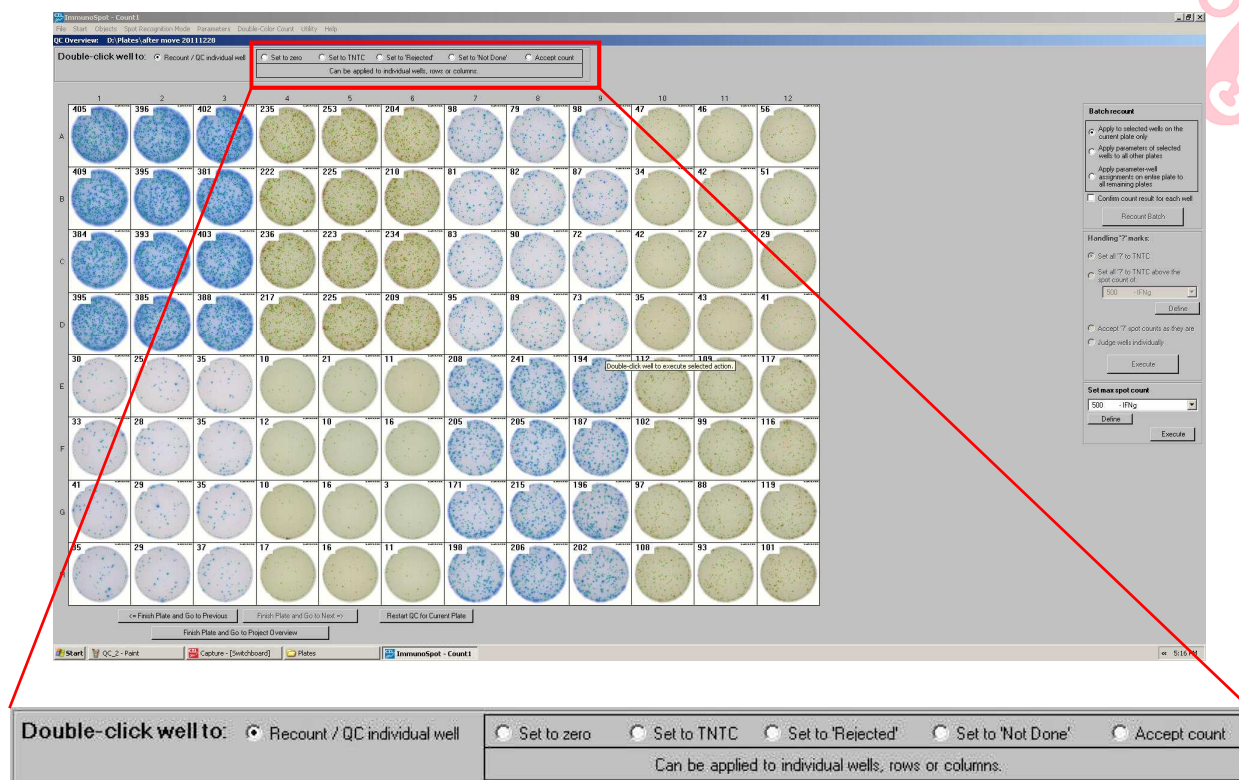
Desktop
 My Documents
 My Computer
 Demo Plates

- Desktop
- My Documents
- My Computer
- C:\
- D:\
 - \$RECYCLE.BIN
 - Demo Plates
 - Plates
 - R410
 - 123
 - test 1
 - RECYCLER
 - System Volume Information
 - E:\
 - R:\
 - W:\
 - Ext Demo Plates

R410

Not a plate.

Select EXIT Select Plates Dialog



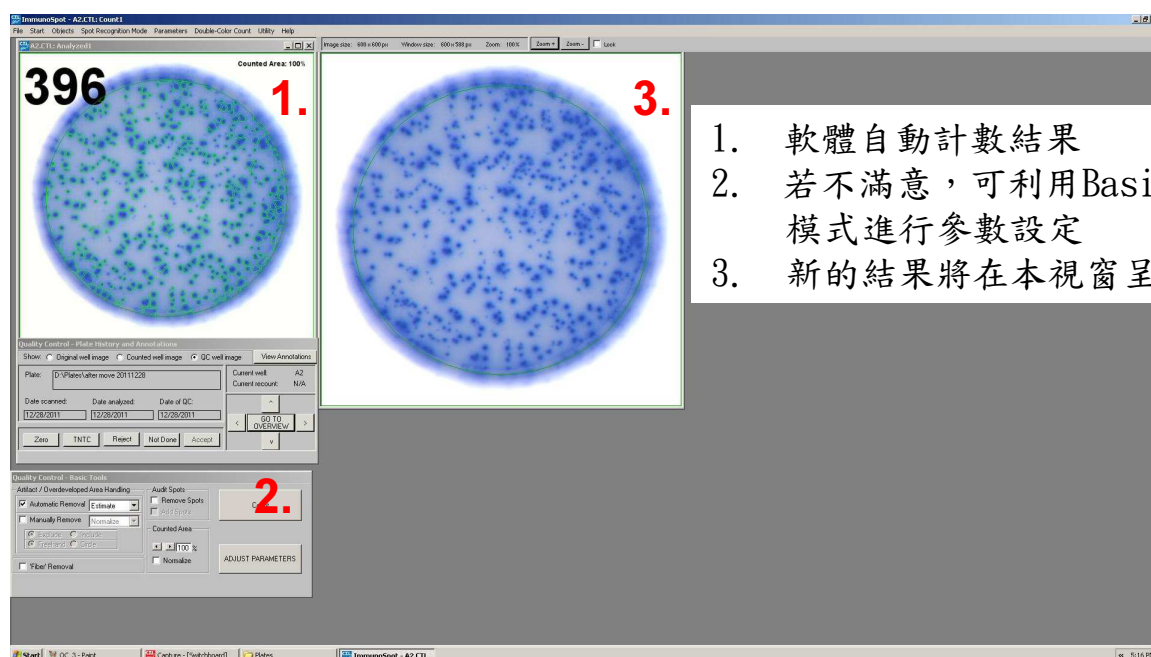
Recount: 重新以Basic count模式進行分析

Zero: 將well數目設定為0，常用於Neg Control

TNTC: Too Numerous To Count，常用於Pos Control

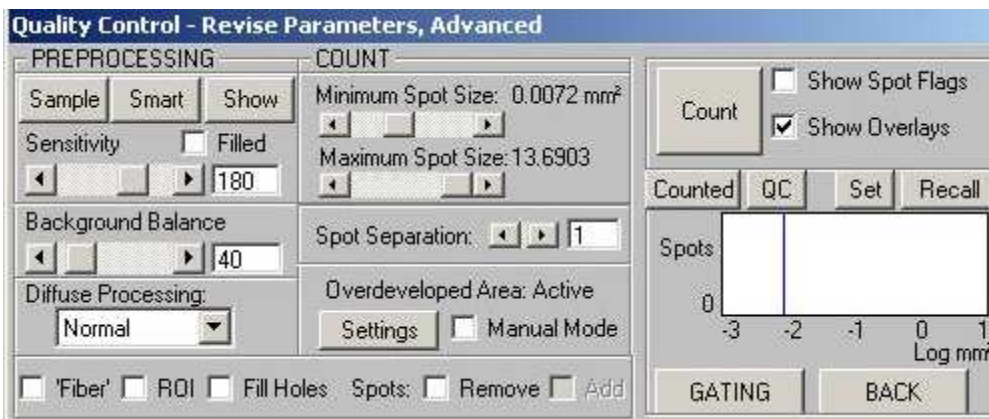
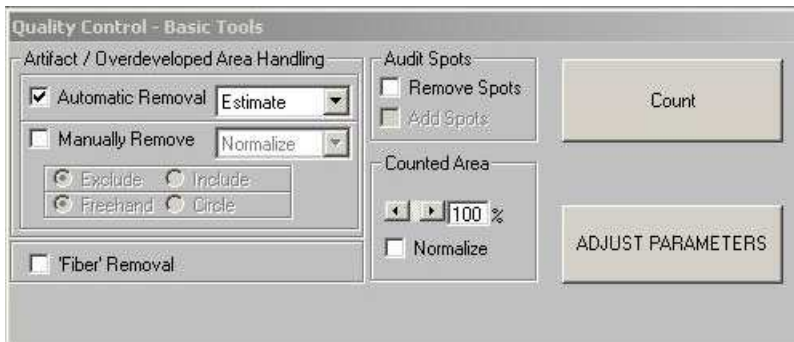
Rejected: 將某個well從本次實驗剔除

Accept count: 接受軟體所計數的結果



1. 軟體自動計數結果
2. 若不滿意，可利用Basic Count模式進行參數設定
3. 新的結果將在本視窗呈現

Quality Control 參數設定



Sensitivity: 數值越大，數到的數目越多，相對也較易計數到背景值

Background Balance: 請維持初始設定

Diffuse Processing: 依照本次實驗所得斑點大小決定 Largest - Small

Fiber: 勾選後，自動去除絲狀物，如棉絮或睫毛

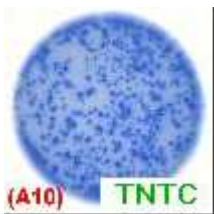
Min/Max Spot size: 設定斑點大小範圍

Spot Separation: 數值越大，越容易將相鄰的點算成一個

Manual Mode: 勾選後按Count，即可手動圈選不想列入計算的面積

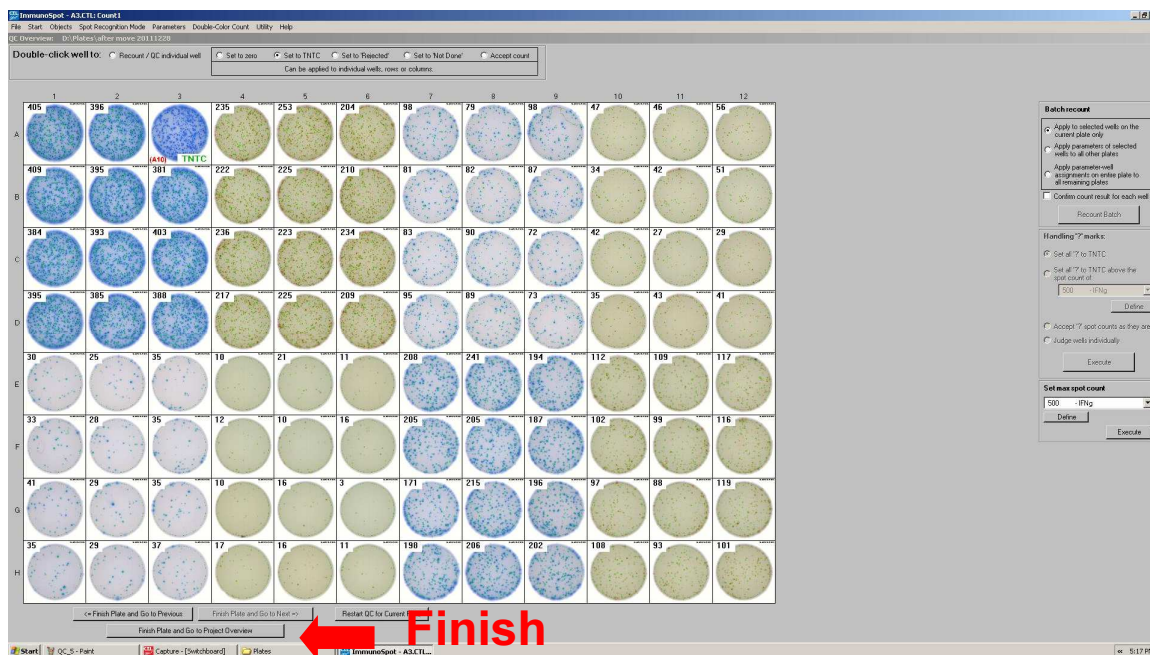
Spot remove: 勾選後按Count，即可手動去除任何不想列入計算的單點

Counted Area: 當well周圍出現濃染時，可藉由縮小百分比將濃染區排除在計算之外



完成QC後，新的計算結果標識為綠色並給一個紅色電子簽章，對每一項參數的修正皆有其對應的簽章號碼

Quality Control 參數設定



Finish 完成 Quality Control，系統將自動輸出每個 well 單一圖檔，Excel 方便使用者進行統計分析

若您在操作上有任何疑問，歡迎與尚博生技聯繫 02-2785-5860