



HUMAN HEALTH | ENVIRONMENTAL HEALTH

B

Using the EnSpire Manager Software

Opening the EnSpire Manager Software



1

When the computer is powered on it will first boot to the Vista® operating system.

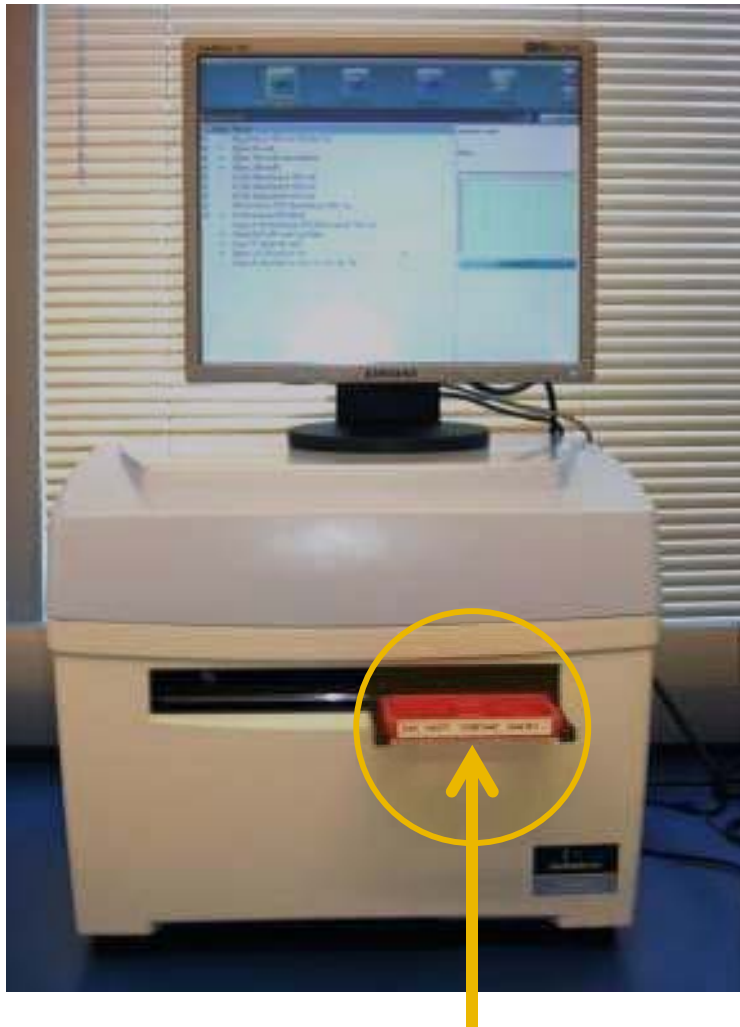
2

Turn on Instrument.

3

Double-click on the EnSpire Manager icon to open the EnSpire Manager software.

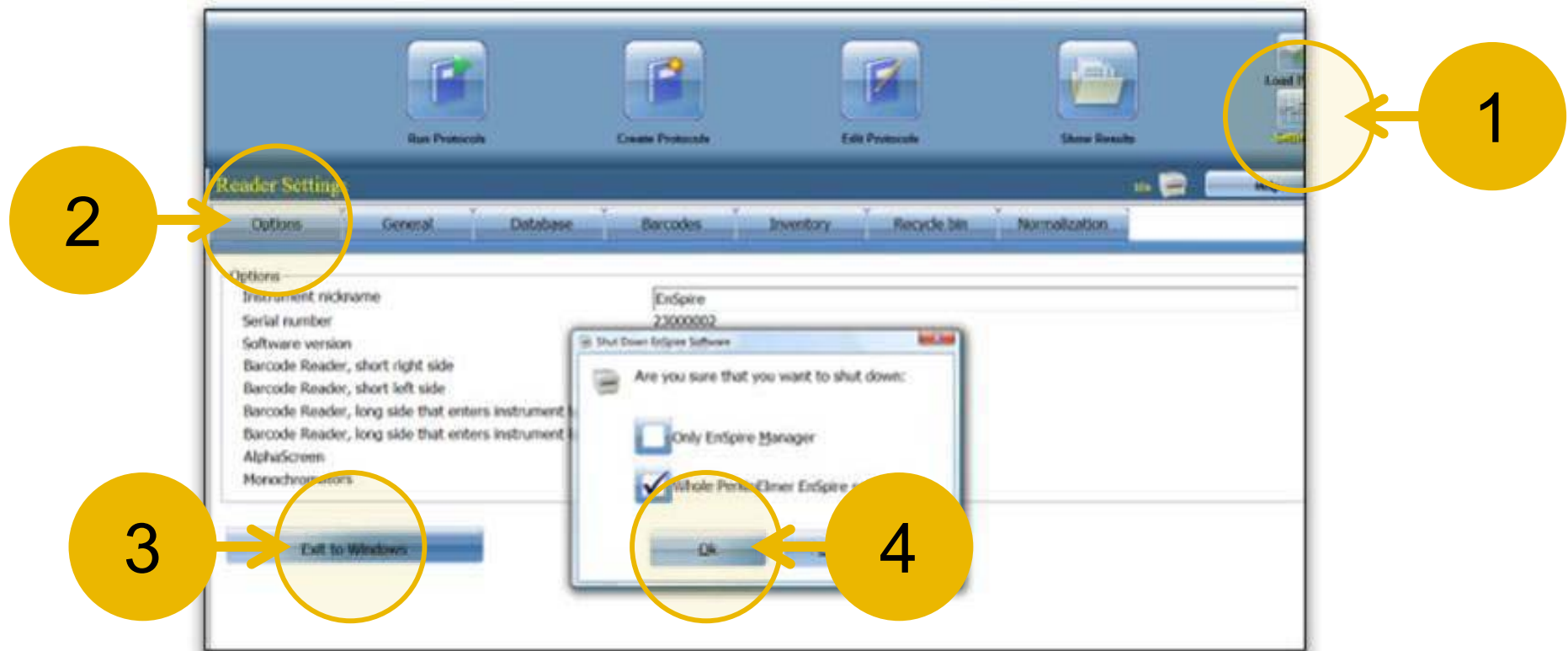
 Note: When the EnSpire software is launched you will hear the plate XY track moving



- While the EnSpire Manager software is loading the instrument will initialize.
- The plate carrier will unload the red transport plate which locks down the instrument during transport to prevent damage.
- Remove the transport plate.
- **DO NOT** throw away the transport plate, since it needs to be re-loaded into the instrument when the instrument is packed for return shipment.

Red Transport Plate

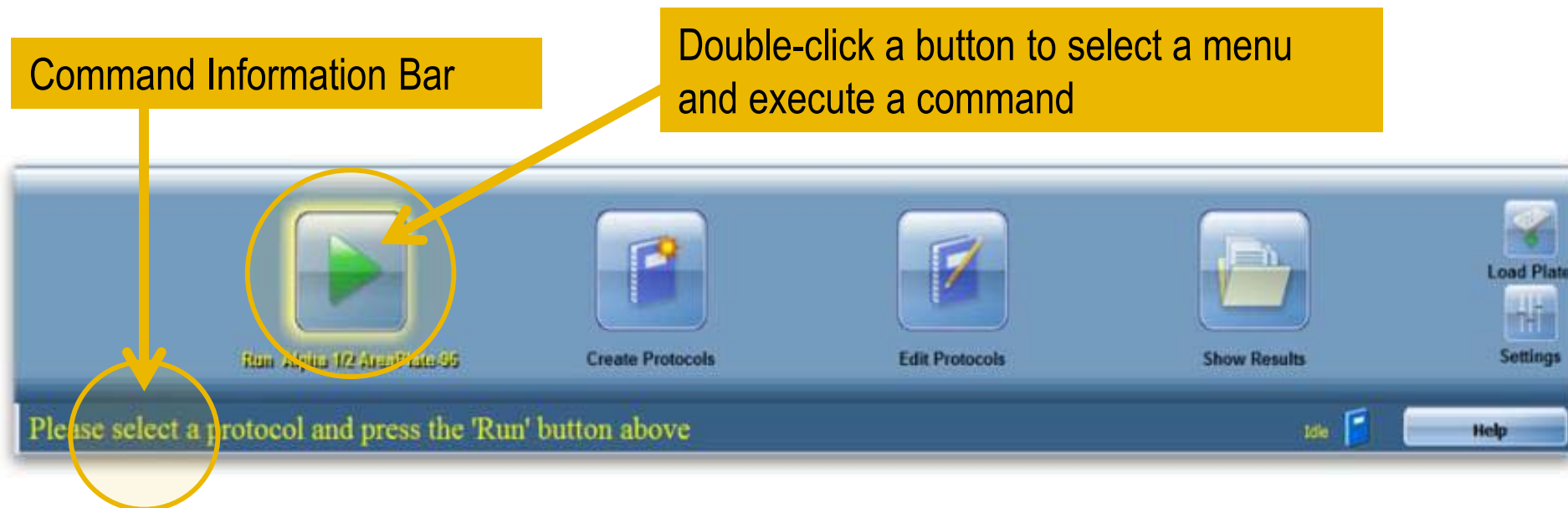
Exiting the EnSpire Manager Software



- 1 Press the “Settings” button.
- 2 Press the “Options” tab.
- 3 Press “Exit to Windows”.
- 4 Press “OK”.



Navigation Panel: A Simple Dashboard



- This dashboard is always visible.
- Four main functions
 - Run Protocols
 - Create Protocols
 - Edit Protocols
 - Show Results
- **Touch** a button to select a command. Press again to execute that command. (**Double-click** to both select and execute in one step.)
- Under **Settings**, all system parameters can be adjusted.
- The **Command Information Bar** displays guidance for your next steps.



EnSpire Manager: The Four Main Functions



RUN – Run one of the factory defined protocols or one that you have created.

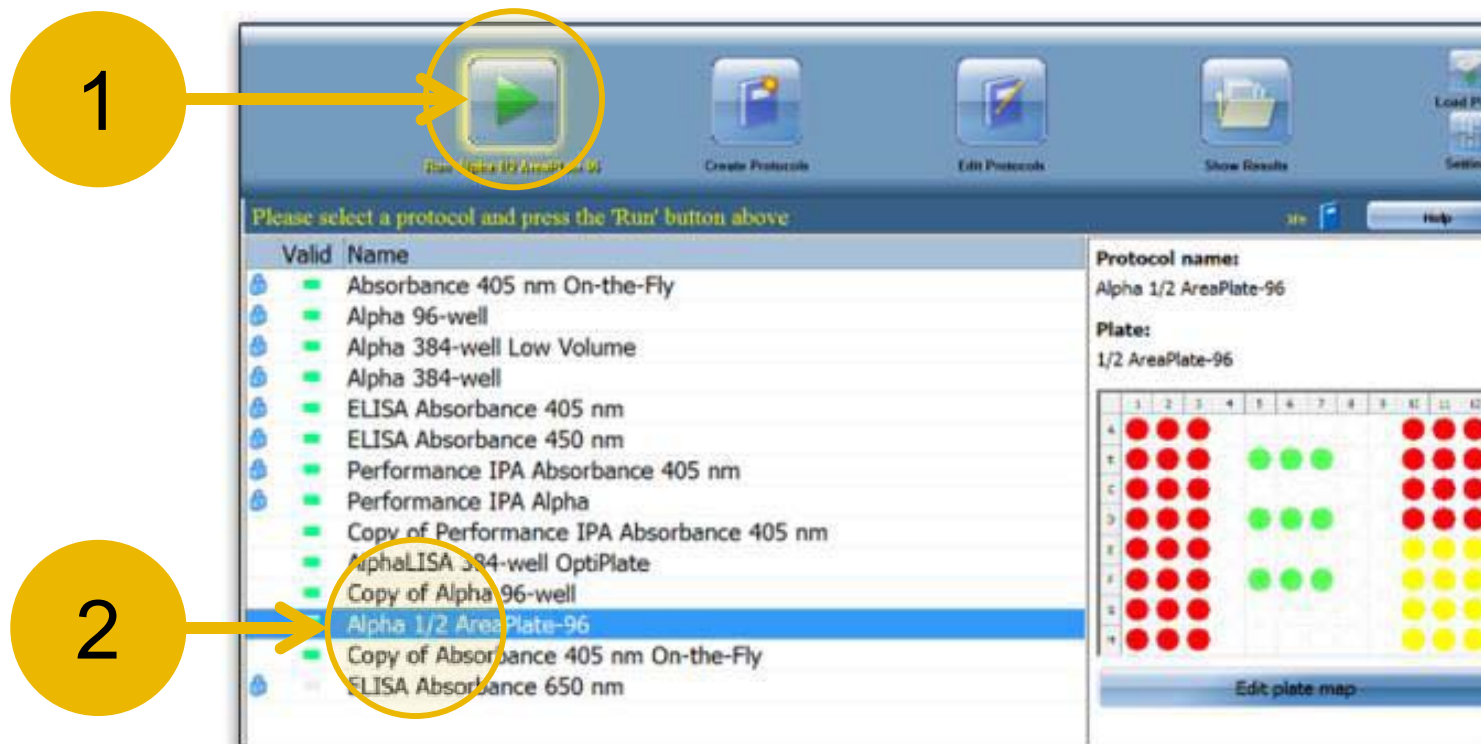
CREATE - New protocols can be created by copying an existing protocol or by using a protocol wizard.

EDIT – Factory protocols cannot be edited, but they can be copied and the copy can be edited. The installed Alpha protocols should not need to be edited other than to change the plate map as needed.

SHOW RESULTS - The software includes a set of standard calculations that can be used to analyze the results of an assay. Assay results can be exported to a USB drive in formats that can be analyzed by software such as Excel or GraphPad Prism.



Run Protocol: The Protocol Menu



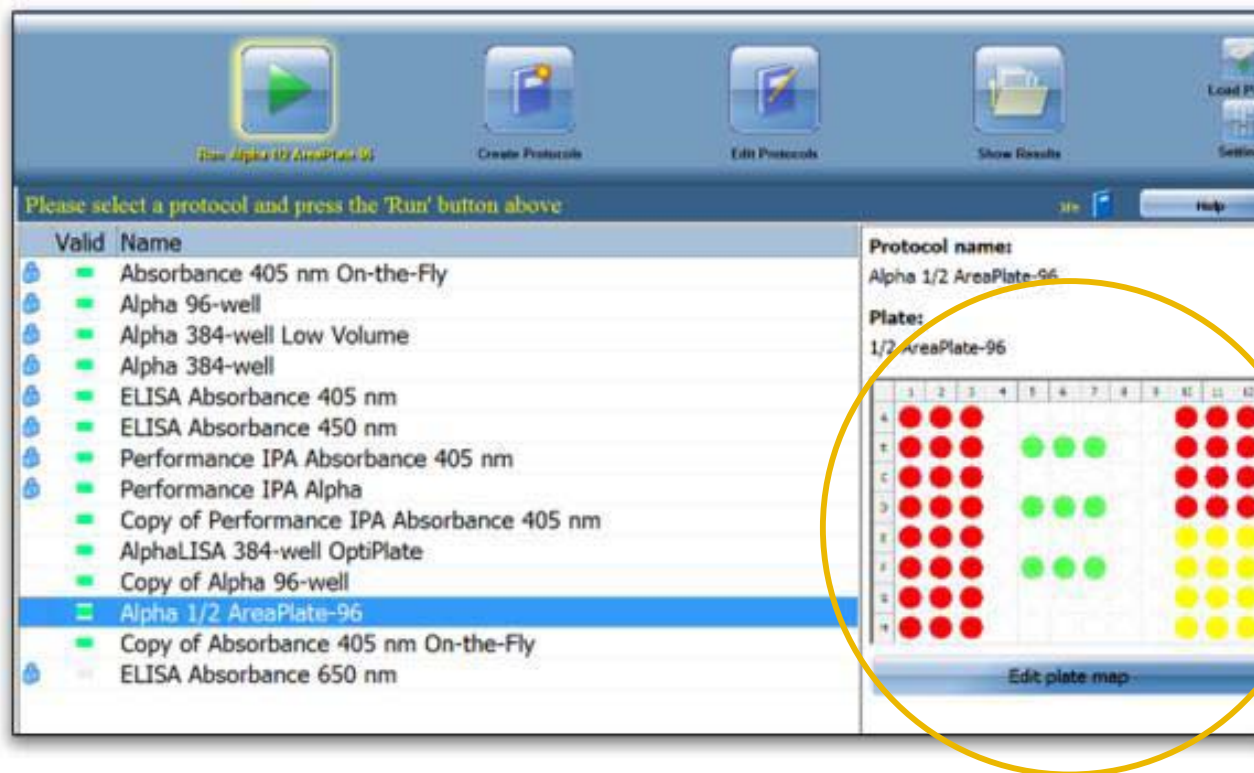
1 Press the “Run Protocol” button to view the protocol menu.

Valid protocols are marked green, meaning that the instrument has the necessary filters installed to run the protocol. Protocols marked with a lock icon are factory defined and cannot be edited.

2 Press the name of the protocol you want to run.

e.g. Alpha ½ AreaPlate-96

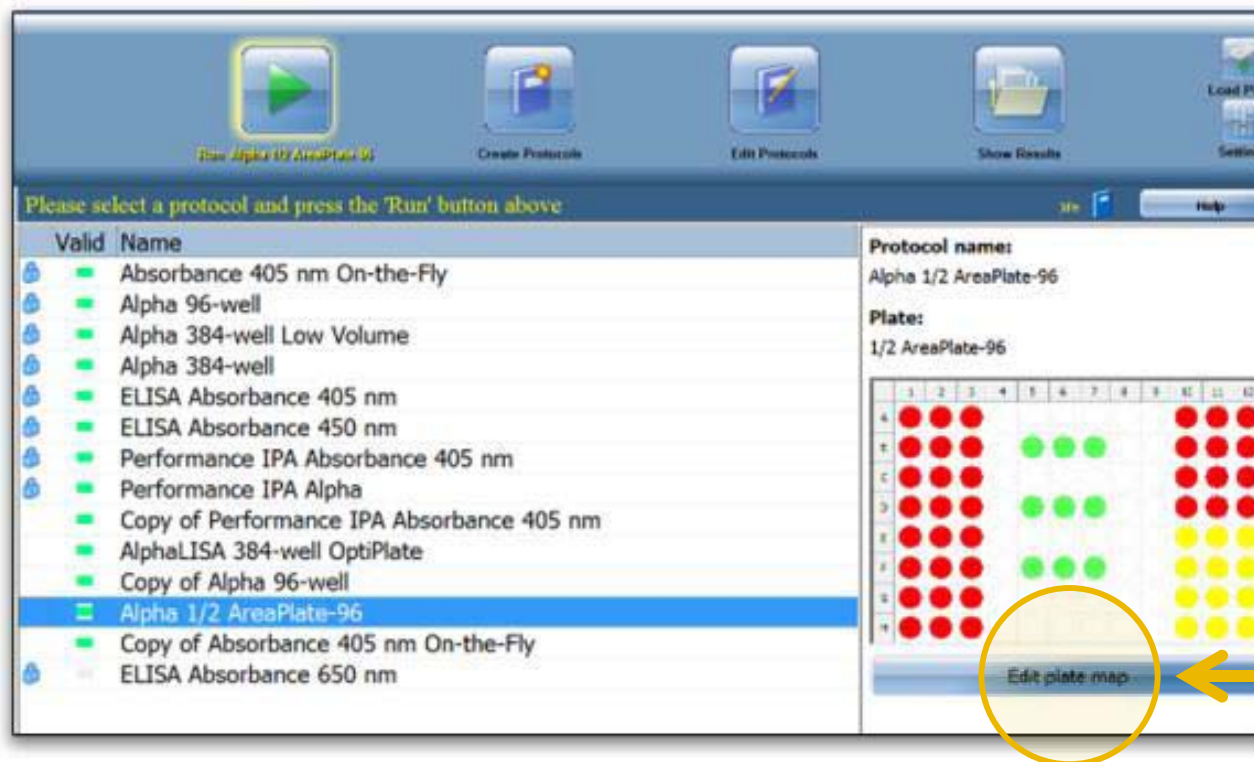
Run Protocol: The Plate Map



- The current plate map for the selected protocol is shown in the lower right of the screen.
- Sample types are color coded
 - **Standard Samples**
 - **Unknown Samples**
 - **Blank Samples**



Run Protocol: Edit the Plate Map – Part 1



- The plate map of unlocked protocols can be edited to designate the type of sample contained in a well.
- Press 'Edit plate map' to access the editing screen.



Run Protocol: Edit the Plate Map – Part 2



1

Press the arrow to access a menu of the available sample types and select desired type.

2

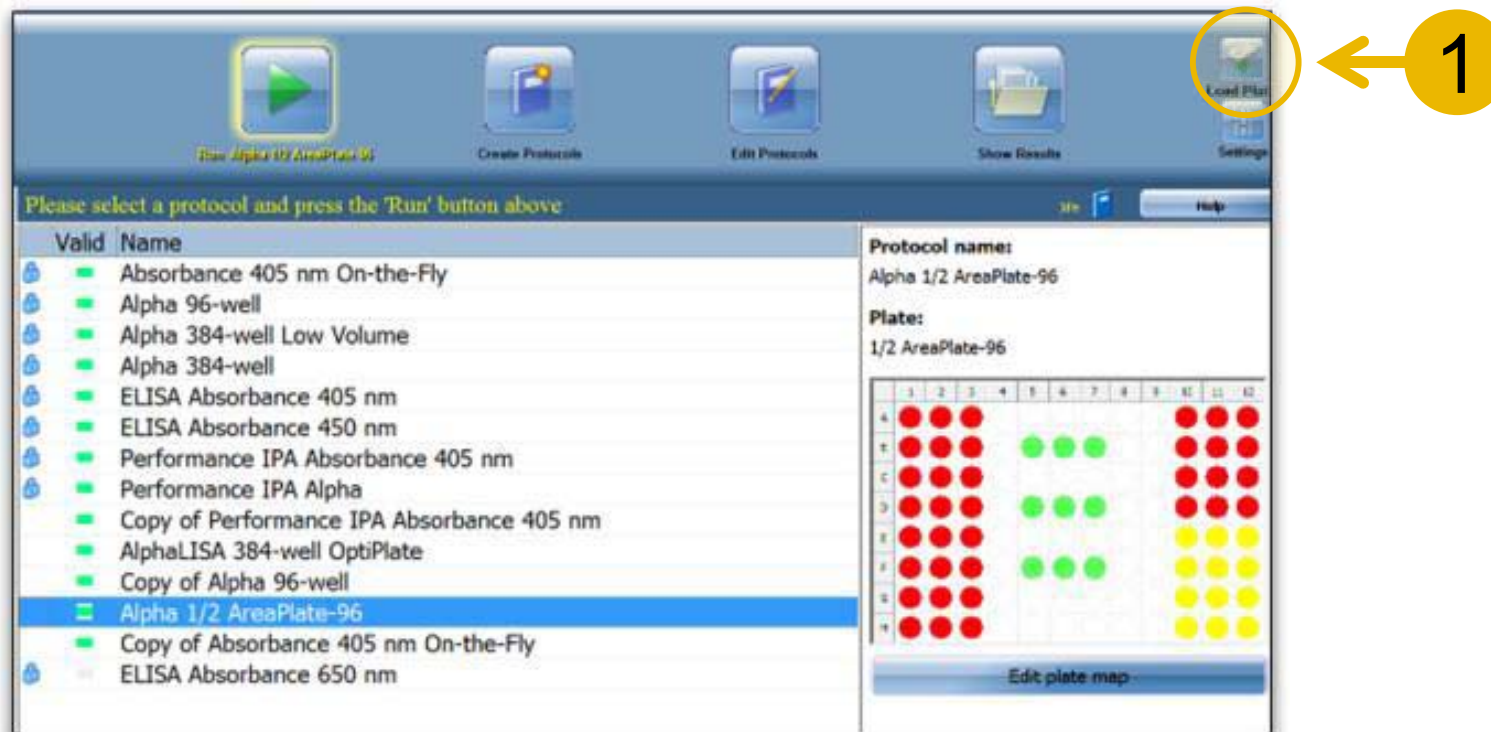
Enter the number of replicates for the selected sample type.

3

Drag your finger across the wells of the plate where the sample types will be placed.

B

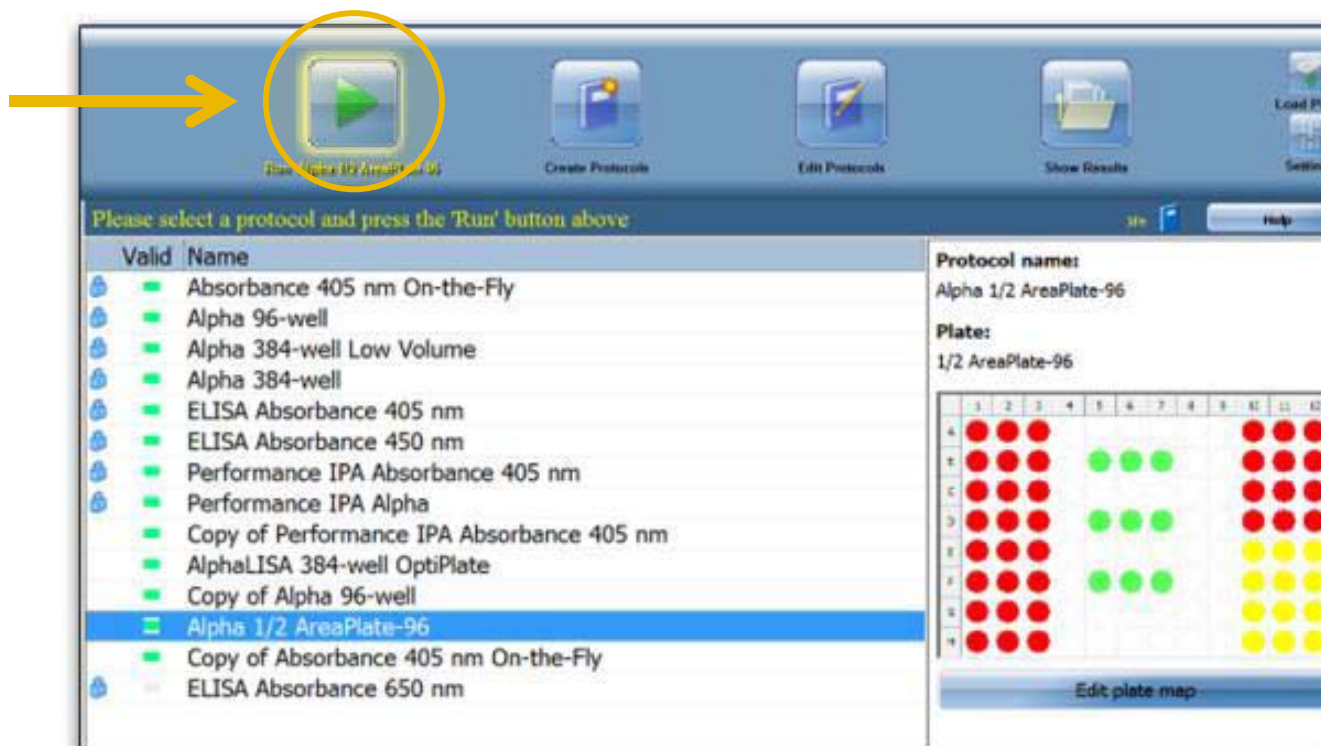
Run Protocol: Loading a Plate



- 1 If the plate carrier is inside the instrument, press the “Unload Plate” button to move the carrier to the outside.
- 2 Make sure the plate is sealed with TopSeal-A film.
- 3 Place the plate on the carrier, ensuring that it is properly seated and level.
- 4 The plate will automatically load when you run the protocol.



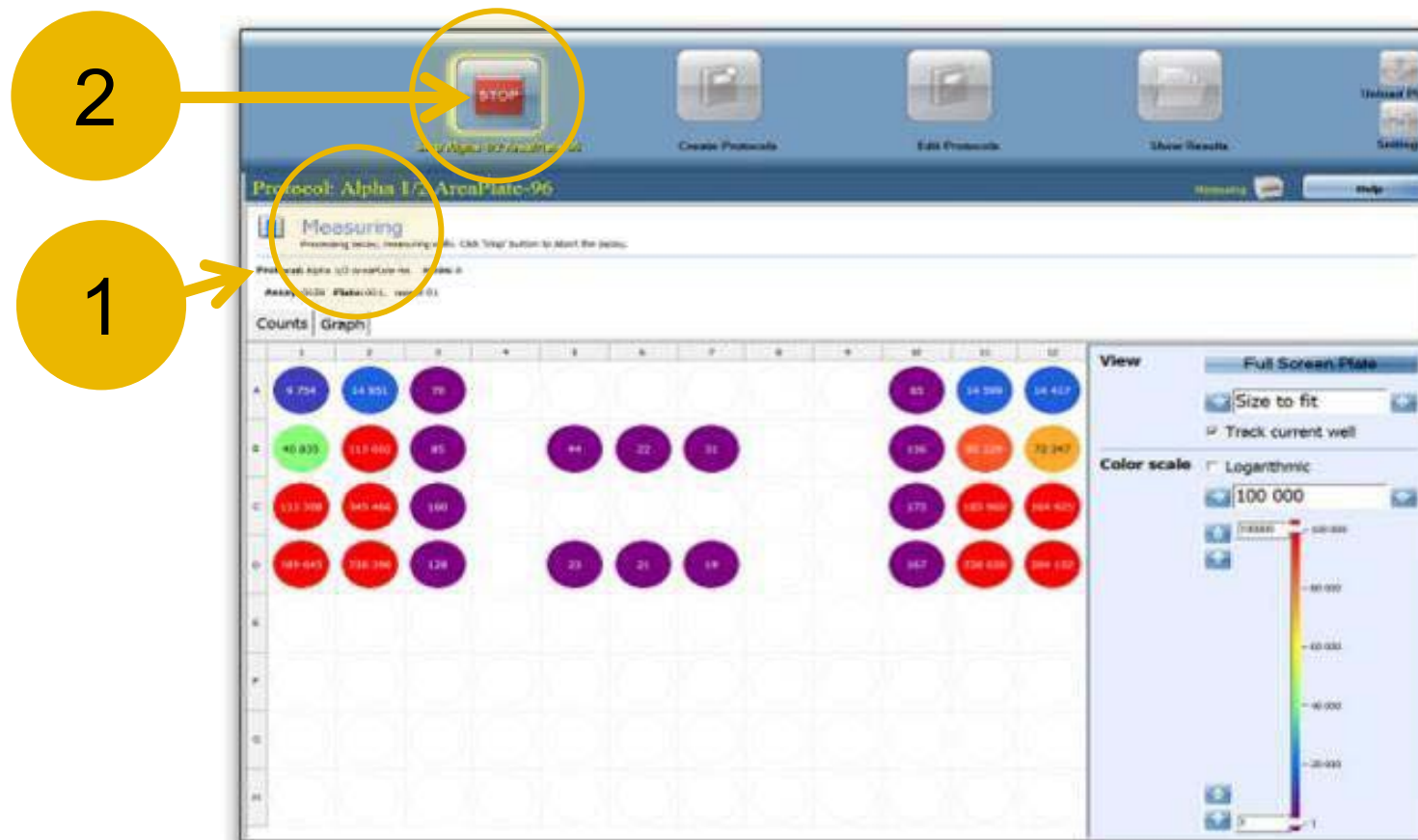
Run Protocol: Starting the Protocol



- Once you have selected the protocol you want to run and placed the plate on the carrier press the “Run Protocols” button for the second time.
- The plate carrier will load the plate into the instrument and the protocol will run.



Run Protocol: Live Display

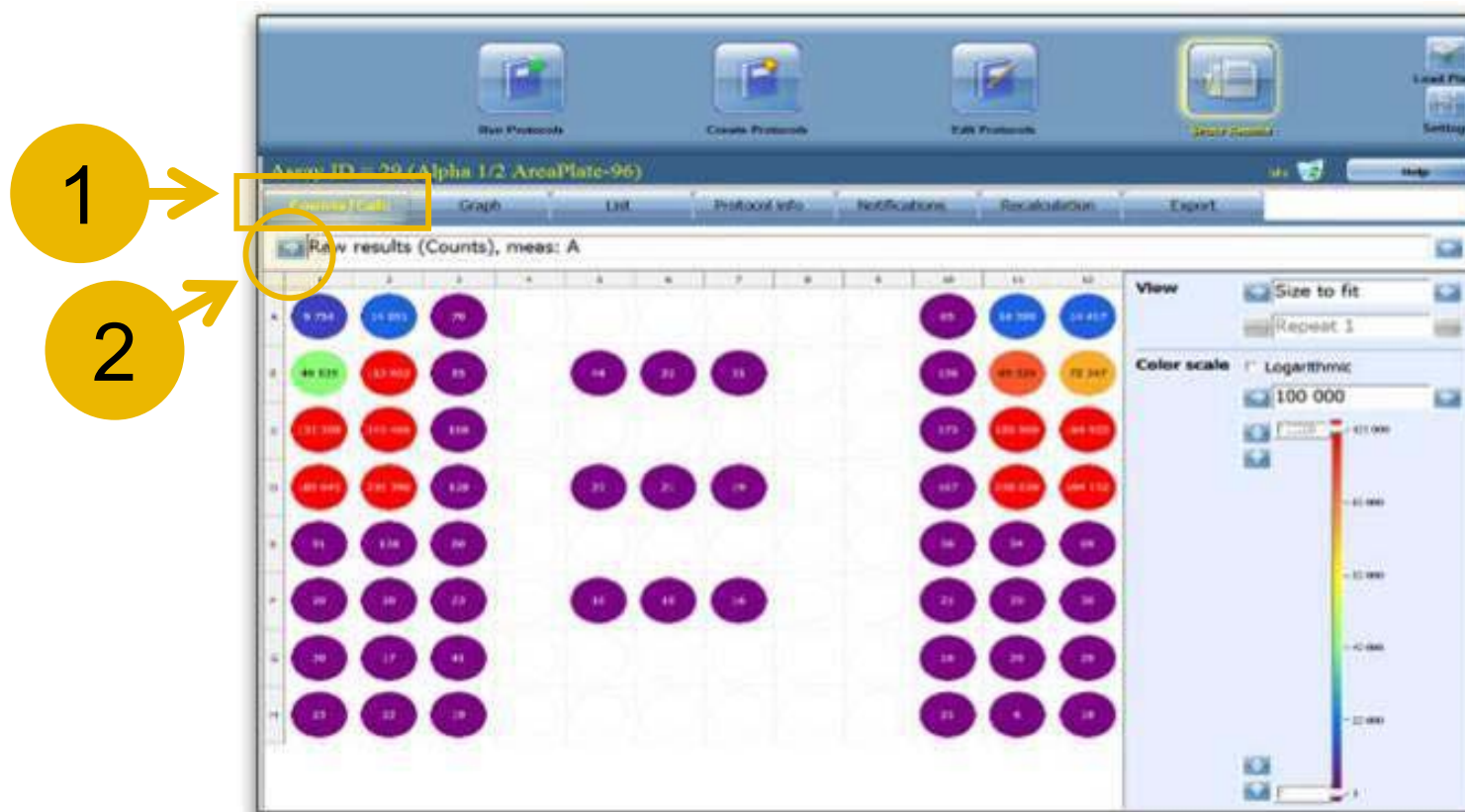


1 Once the protocol starts measuring you will see a live display of the counts in each well.

2 The protocol can be stopped at any time by pressing the “Stop” button.



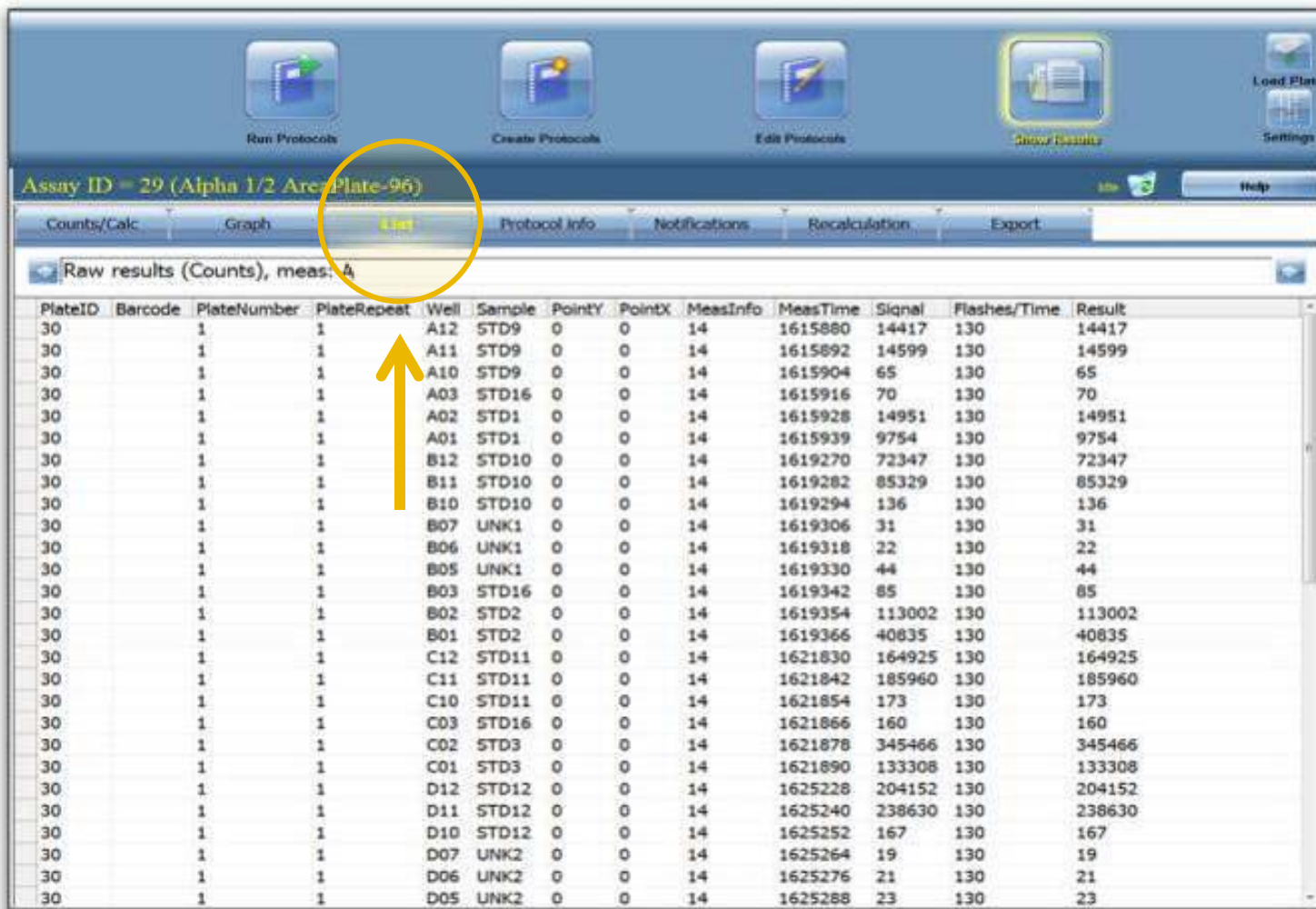
Show Results: Counts/Calc Tab



- 1 When the protocol is completed the counts are shown in the “Counts/Calc” tab. The results are automatically stored in the database.
- 2 Any calculations associated with the protocol can be viewed by pressing the arrow below the tab.



Show Results: List Tab



Assay ID = 29 (Alpha 1/2 Arc Plate-96)

Counts/Calc | Graph | **List** | Protocol Info | Notifications | Recalculation | Export

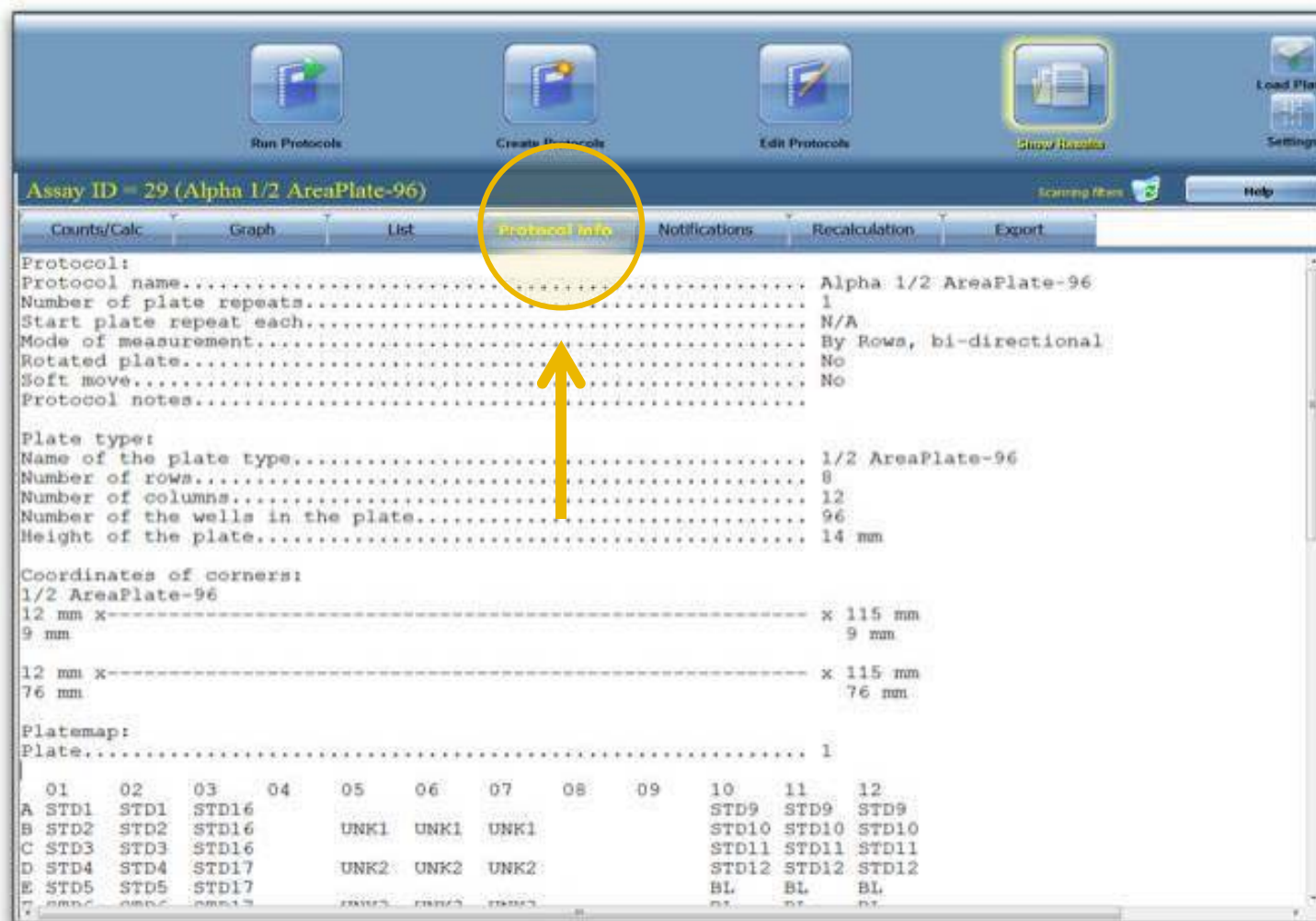
Raw results (Counts), meas: A

PlateID	Barcode	PlateNumber	PlateRepeat	Well	Sample	PointY	PointX	MeasInfo	MeasTime	Signal	Flashes/Time	Result
30		1	1	A12	STD9	0	0	14	1615880	14417	130	14417
30		1	1	A11	STD9	0	0	14	1615892	14599	130	14599
30		1	1	A10	STD9	0	0	14	1615904	65	130	65
30		1	1	A03	STD16	0	0	14	1615916	70	130	70
30		1	1	A02	STD1	0	0	14	1615928	14951	130	14951
30		1	1	A01	STD1	0	0	14	1615939	9754	130	9754
30		1	1	B12	STD10	0	0	14	1619270	72347	130	72347
30		1	1	B11	STD10	0	0	14	1619282	85329	130	85329
30		1	1	B10	STD10	0	0	14	1619294	136	130	136
30		1	1	B07	UNK1	0	0	14	1619306	31	130	31
30		1	1	B06	UNK1	0	0	14	1619318	22	130	22
30		1	1	B05	UNK1	0	0	14	1619330	44	130	44
30		1	1	B03	STD16	0	0	14	1619342	85	130	85
30		1	1	B02	STD2	0	0	14	1619354	113002	130	113002
30		1	1	B01	STD2	0	0	14	1619366	40835	130	40835
30		1	1	C12	STD11	0	0	14	1621830	164925	130	164925
30		1	1	C11	STD11	0	0	14	1621842	185960	130	185960
30		1	1	C10	STD11	0	0	14	1621854	173	130	173
30		1	1	C03	STD16	0	0	14	1621866	160	130	160
30		1	1	C02	STD3	0	0	14	1621878	345466	130	345466
30		1	1	C01	STD3	0	0	14	1621890	133308	130	133308
30		1	1	D12	STD12	0	0	14	1625228	204152	130	204152
30		1	1	D11	STD12	0	0	14	1625240	238630	130	238630
30		1	1	D10	STD12	0	0	14	1625252	167	130	167
30		1	1	D07	UNK2	0	0	14	1625264	19	130	19
30		1	1	D06	UNK2	0	0	14	1625276	21	130	21
30		1	1	D05	UNK2	0	0	14	1625288	23	130	23

Data for each well in the plate that was measured is shown in the "List" tab.



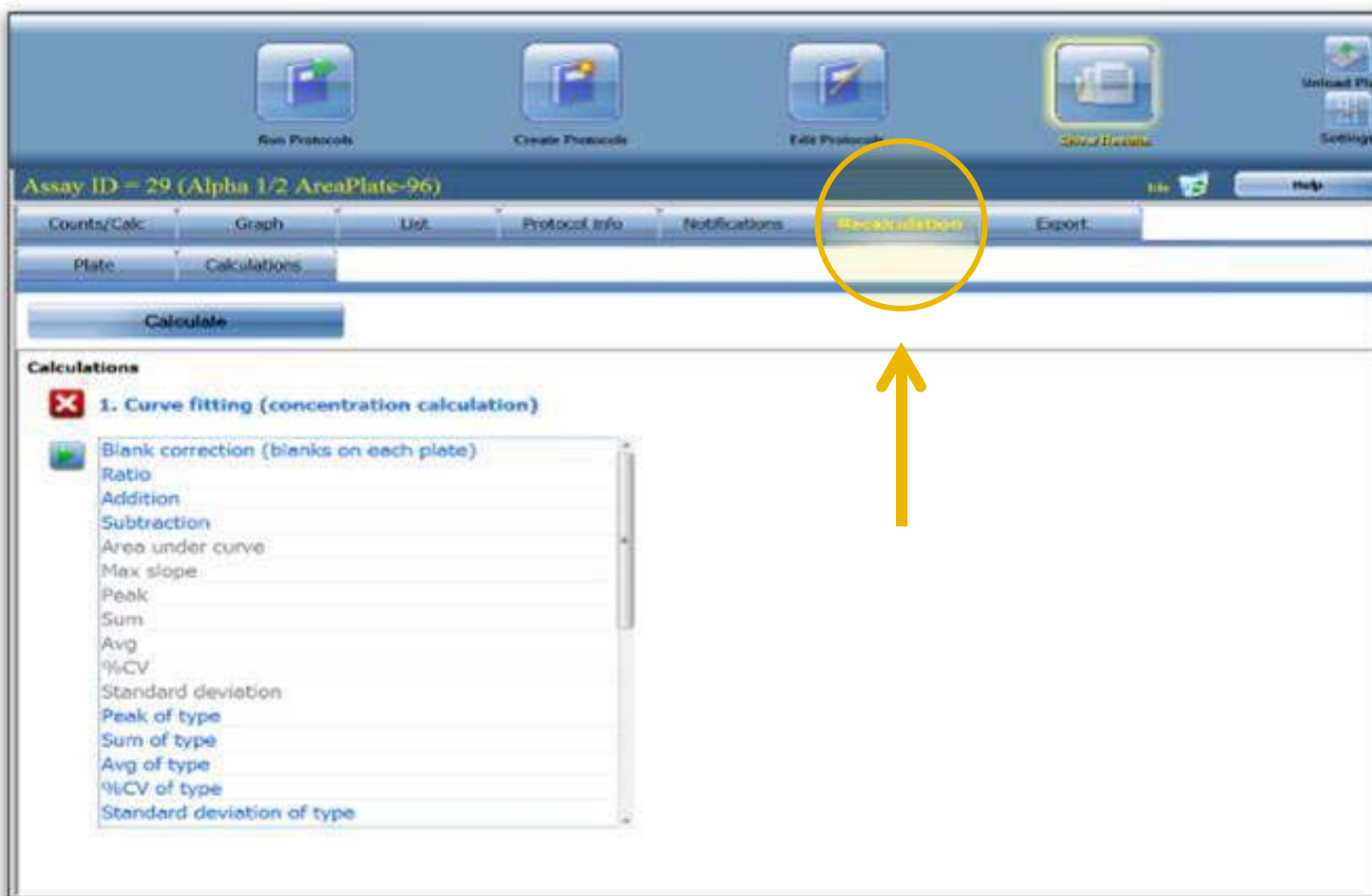
Show Results: Protocol Info Tab



Information regarding the protocol and the plate map are shown in the “Protocol Info” tab.



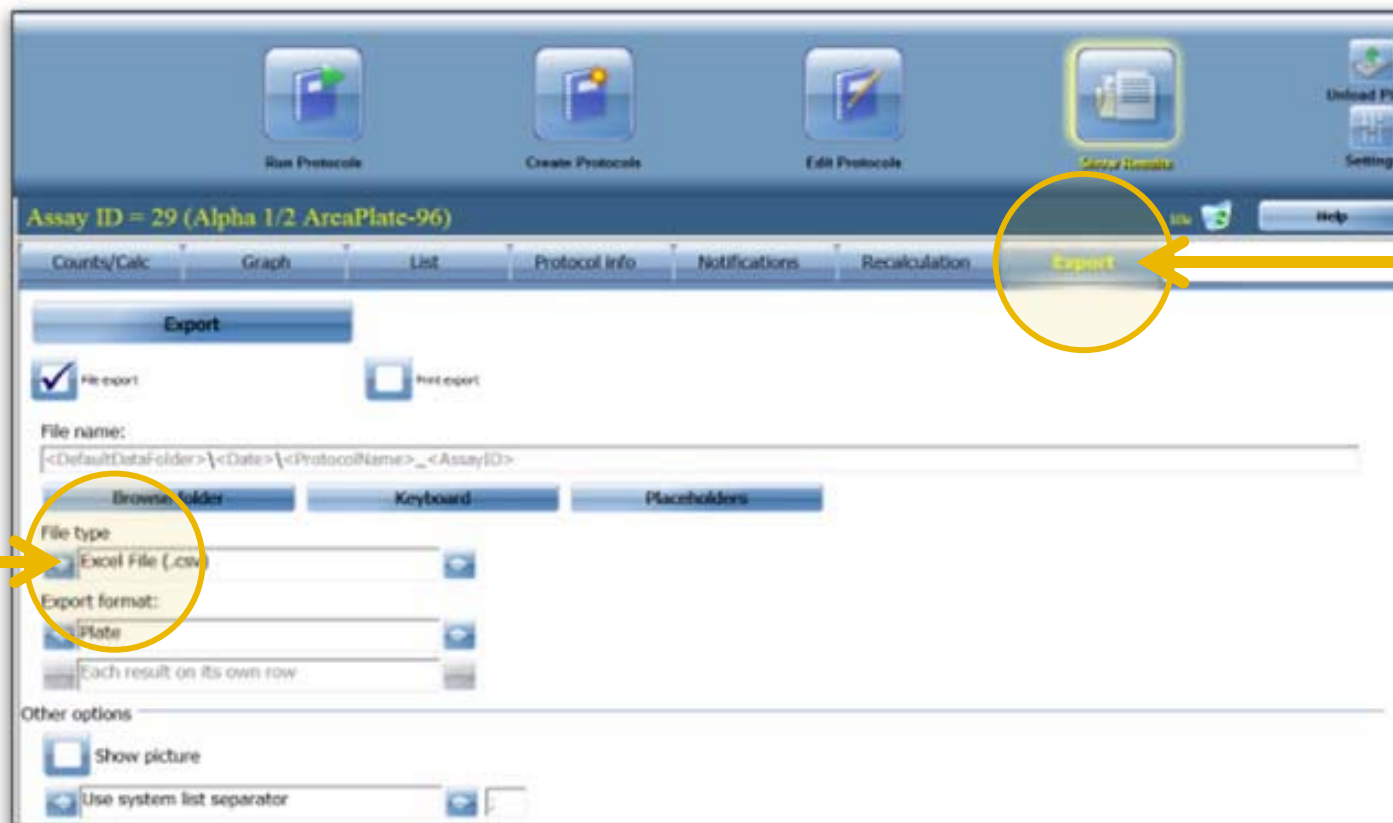
Show Results: Recalculation Tab



- Protocols can be set up to automatically perform calculations when the protocol is finished.
- Calculations or recalculations can also be done after the protocol has run using the “Recalculation” tab.



Show Results: Export – Step 1



To export results to a USB drive:

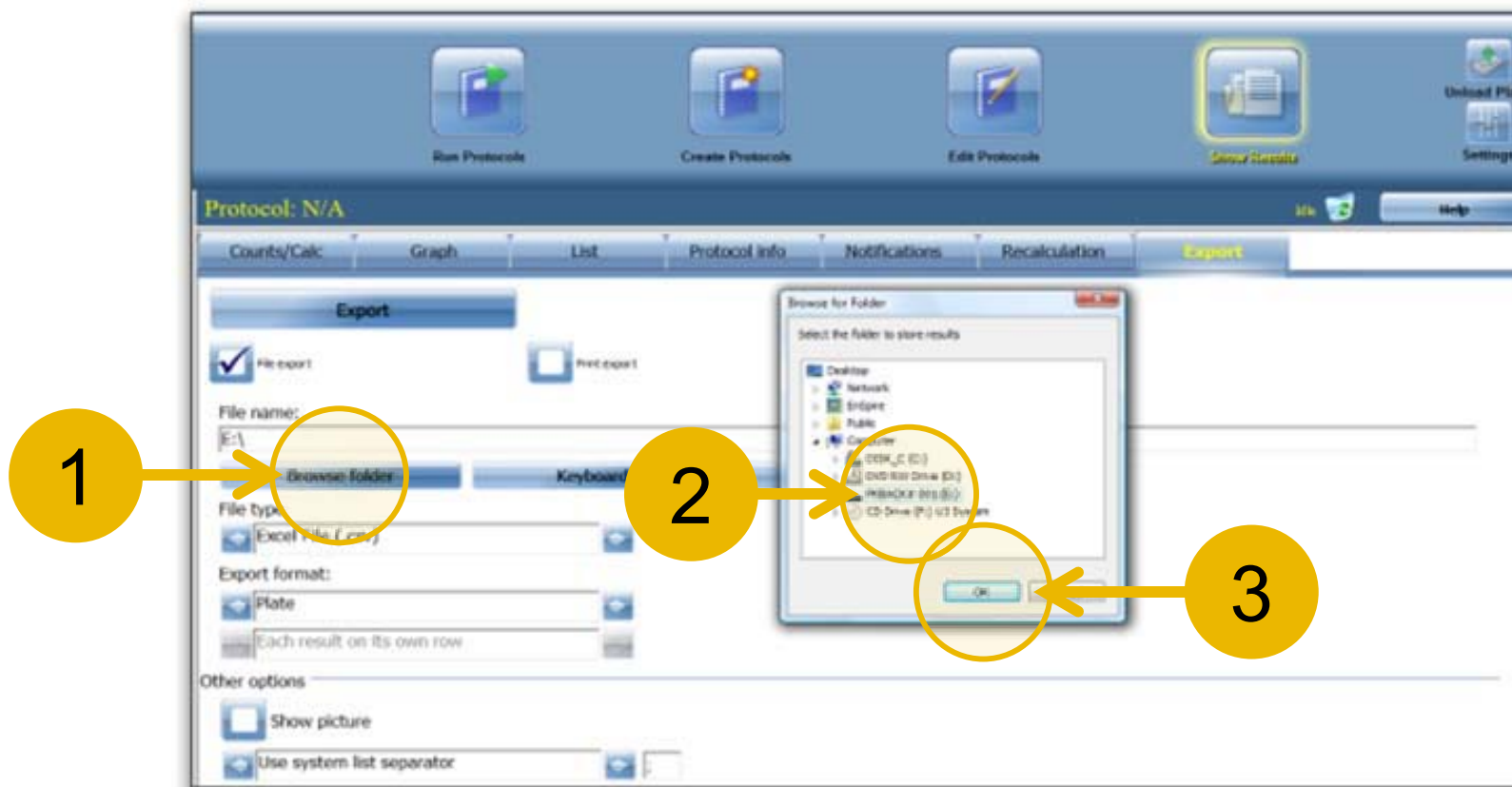
1 Select the “Export” tab.

2 Choose the file type you want for the data:

- Excel File (.csv)
- Text

B

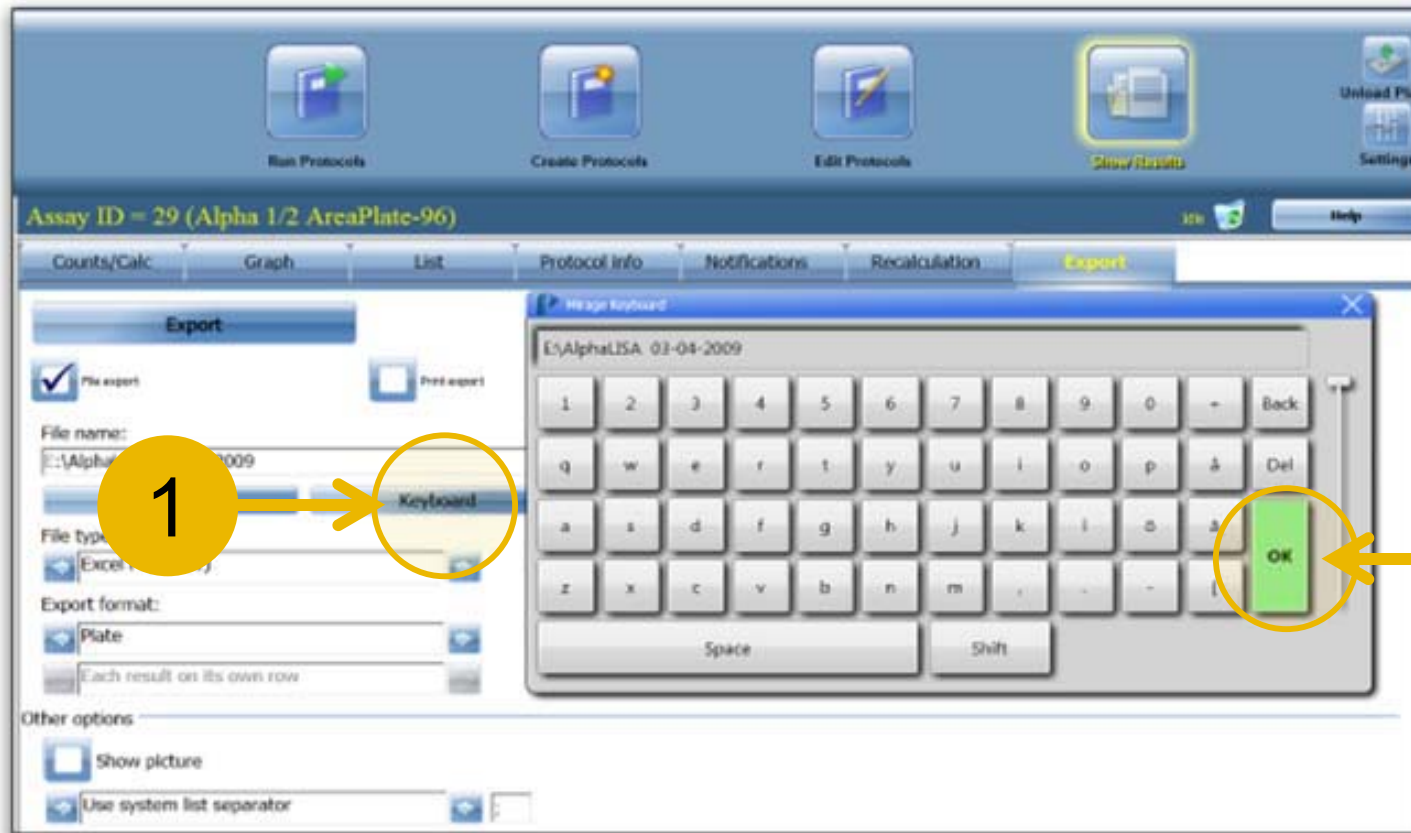
Show Results: Export – Step 2



- 1 Press "Browse folder".
- 2 Select the USB Drive.
- 3 Press "OK".



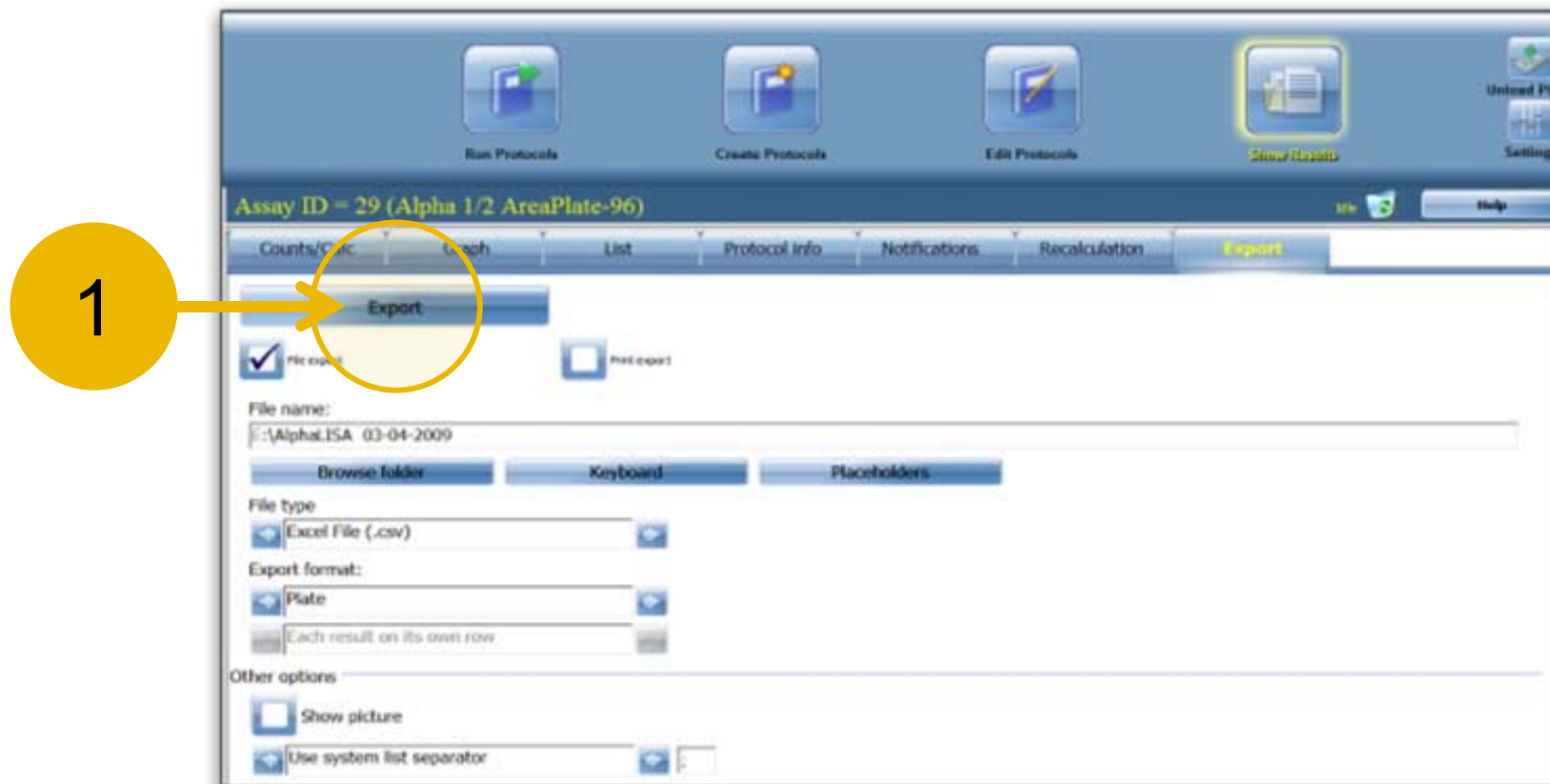
Show Results: Export – Step 3



- 1 Press "Keyboard" to open the keyboard.
- 2 Enter the desired File name using the keyboard.
- 3 Press "OK".

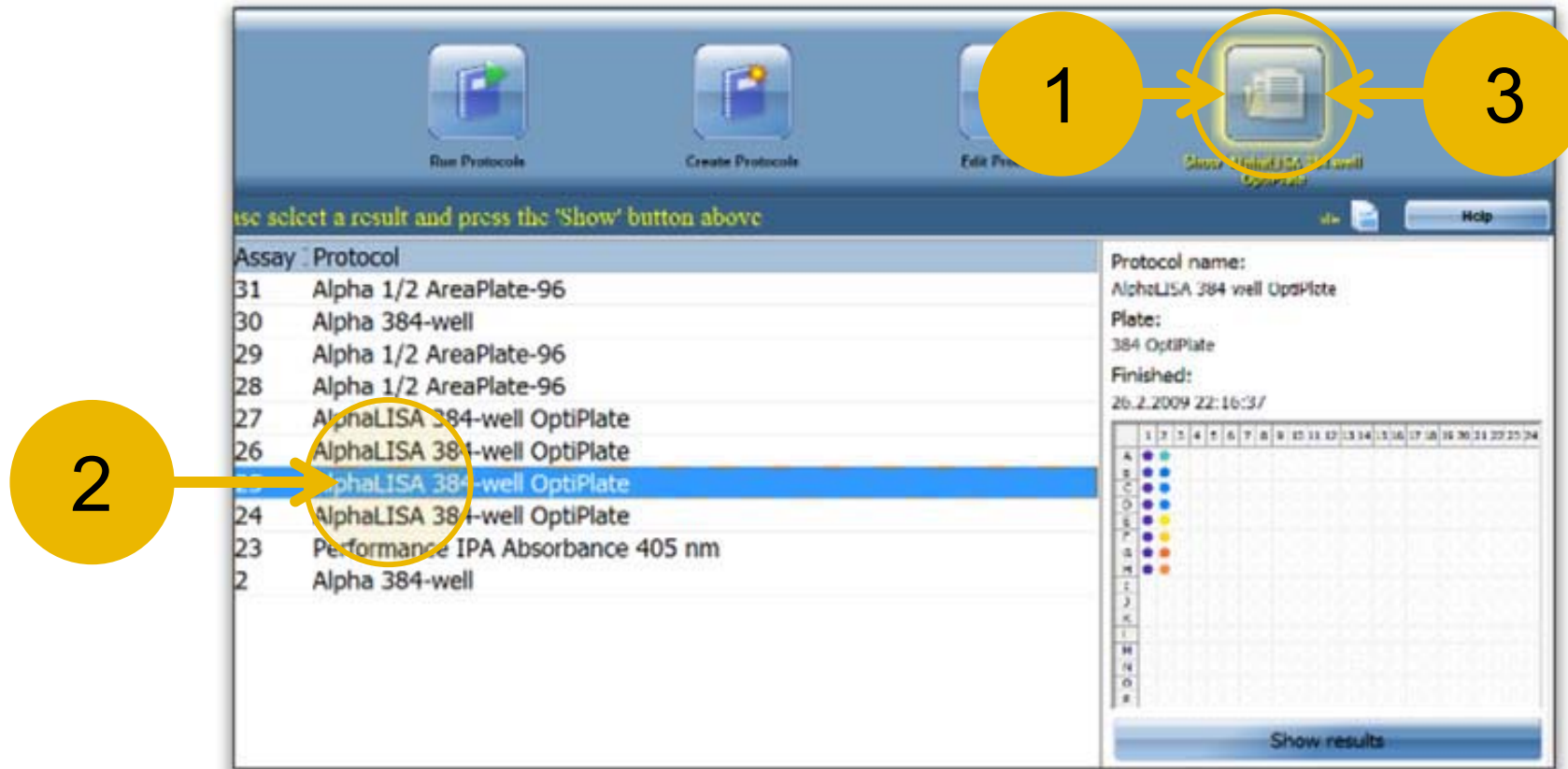


Show Results: Export – Step 4



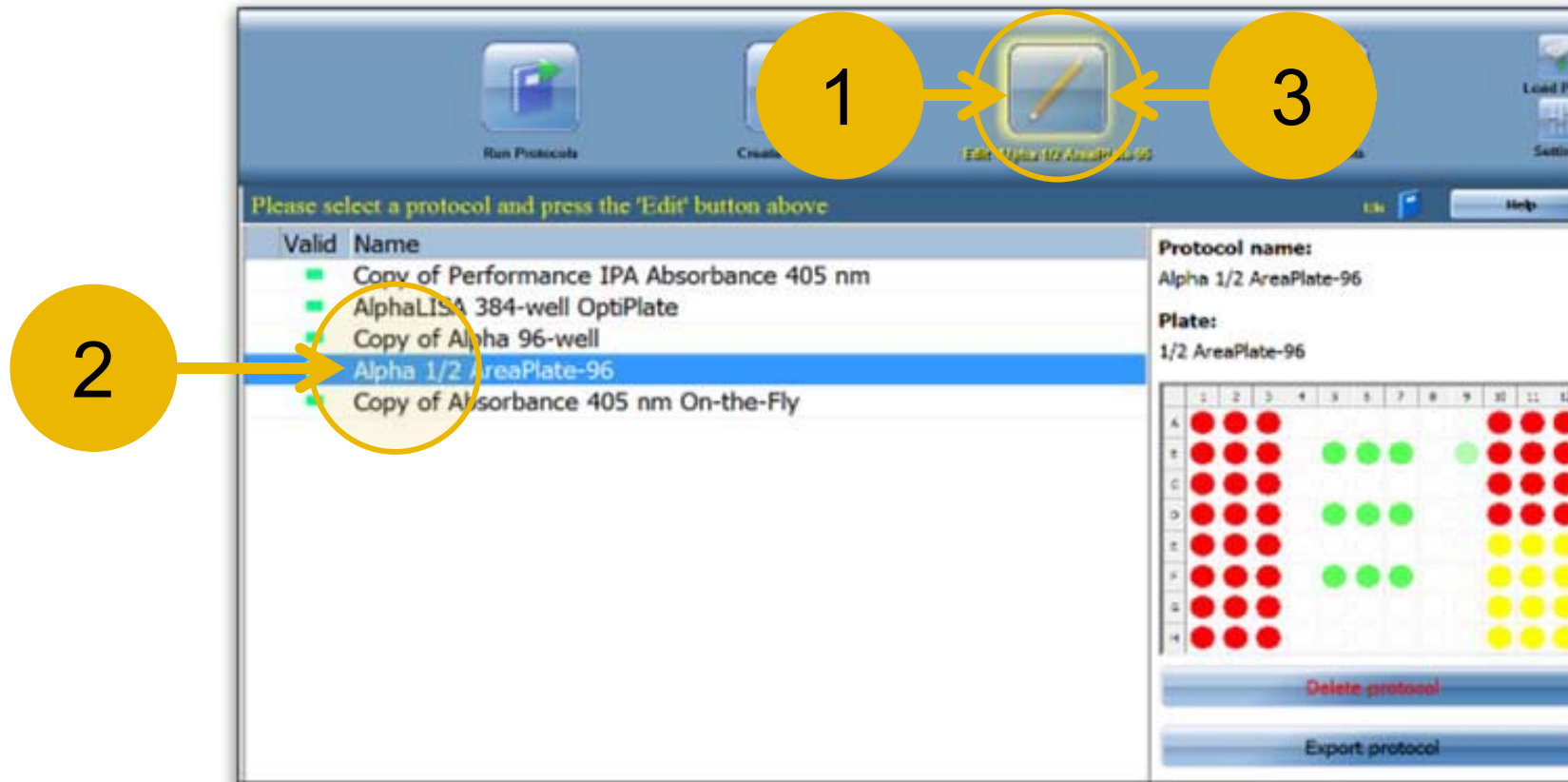
1 Press “Export” to write the file to the USB drive.

Show Results: Previous Assays



The results of all assays in the database can be viewed.

- 1 Press the "Show Results" button.
- 2 Press the protocol you want to view.
- 3 Press the "Show Results" button again.



Protocols that are not locked can be edited.

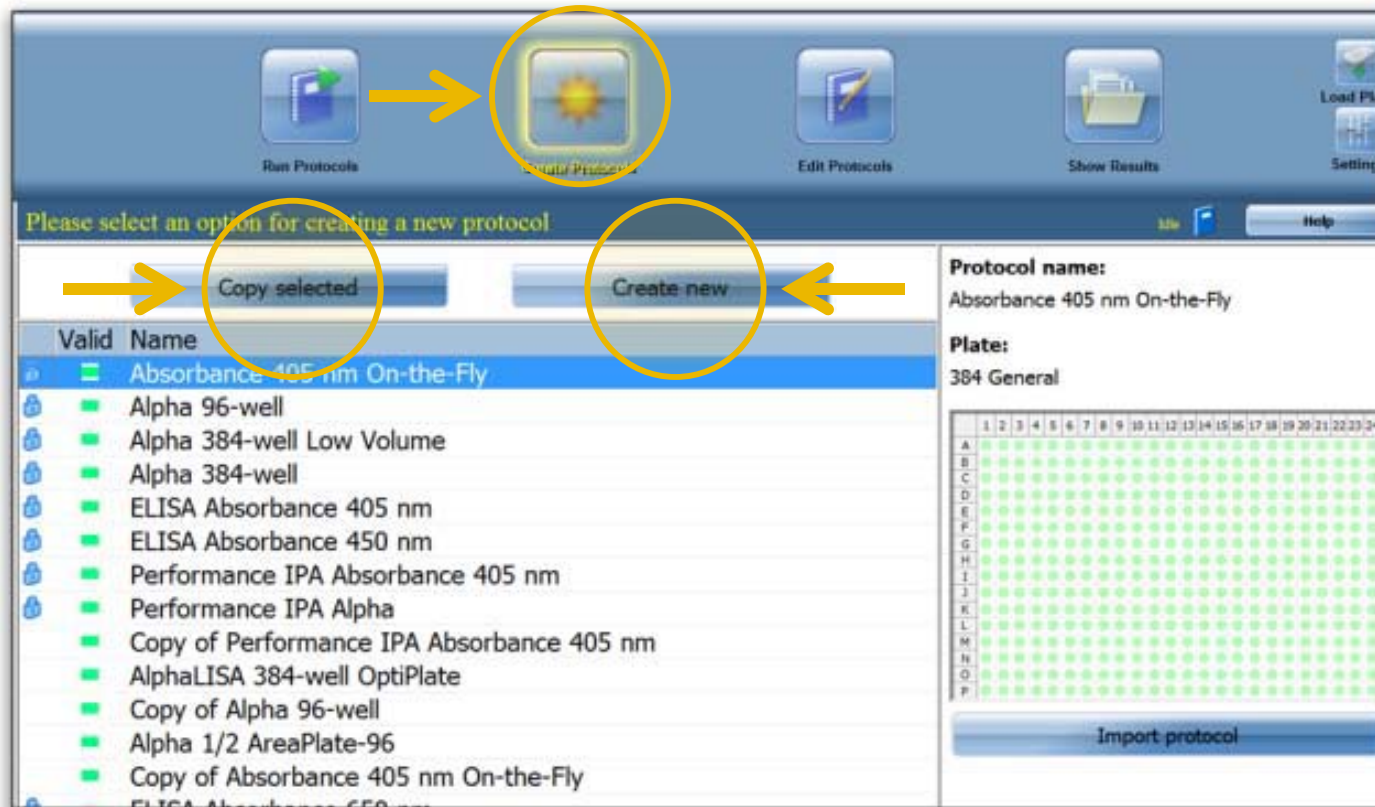
- 1 Press the “Edit Protocols” button to see the menu of all protocols that can be edited.
- 2 Press the name of the protocol you want to edit.
- 3 Press the “Edit Protocols” button again to open the edit screen.



- The plate map for the protocol can be edited in the plate tab.
- Parameters defined in the other tabs on this screen should not be edited during the evaluation.
- If you edit the plate map press “Save changes”.

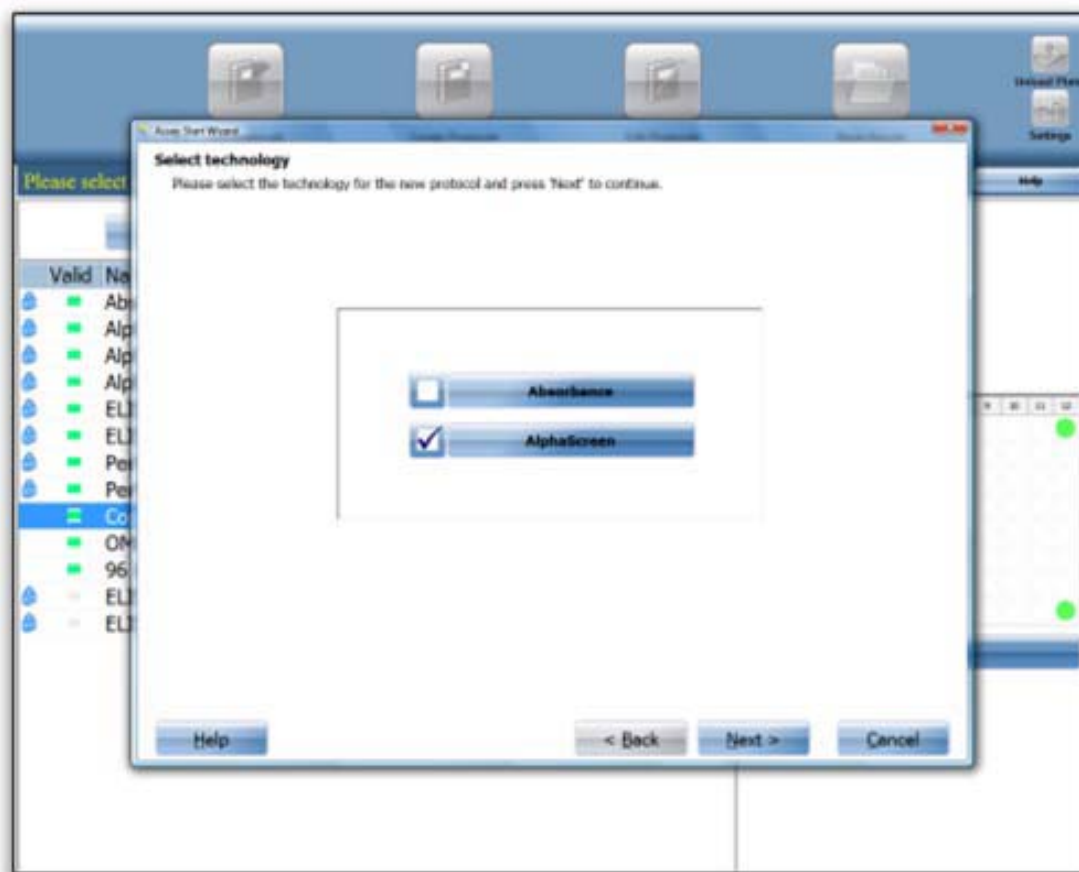


Creating a New Protocol



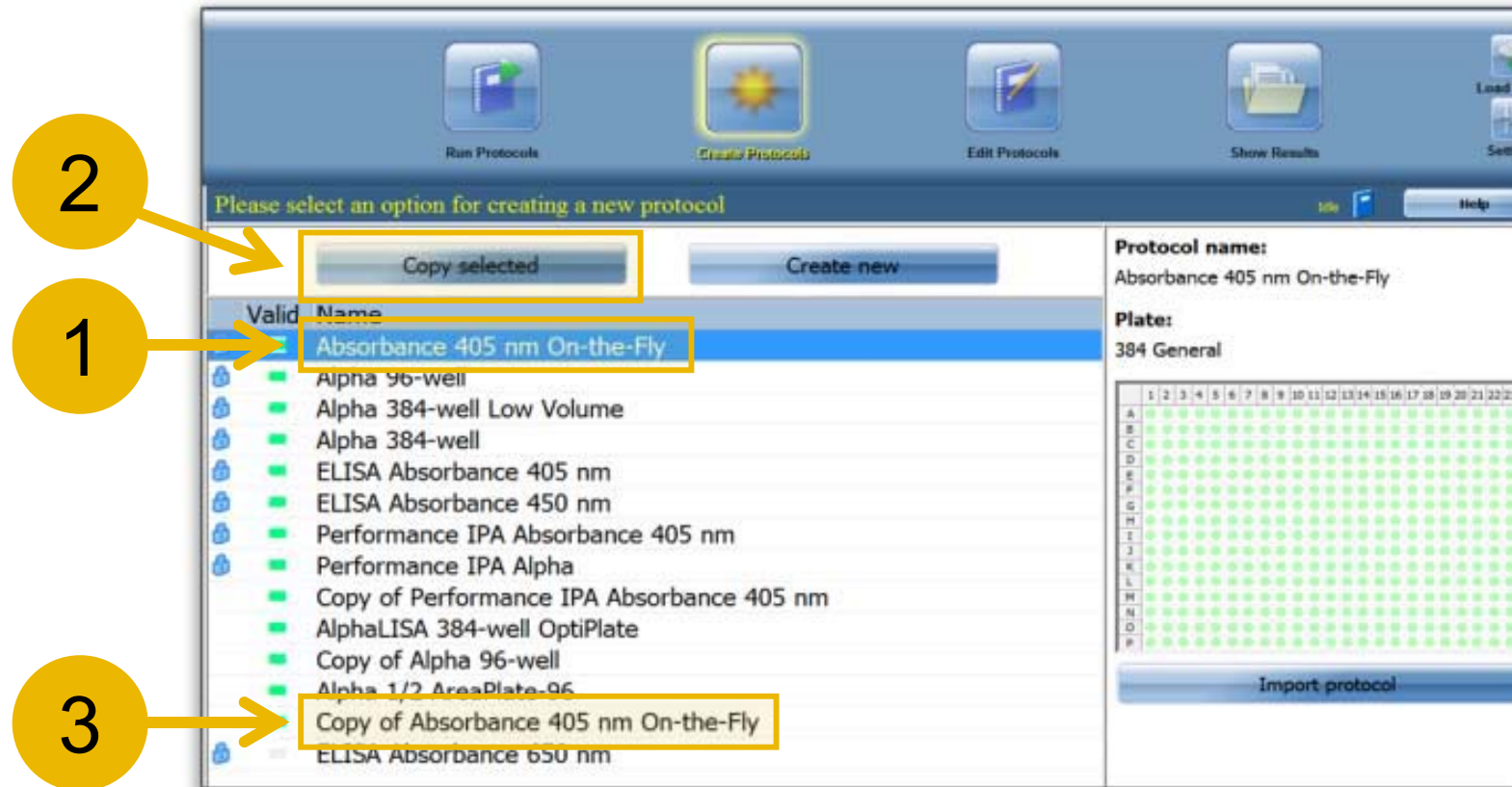
There are two options for creating new protocols.

- Existing protocols can be copied and the copy renamed and edited.
- New protocols can be created using a protocol wizard.



Pressing the “Create new” button launches Assay Start Wizard that guides you step-by-step through the process of creating a protocol.

Copying a Protocol



All protocols locked or unlocked can be copied.

1 The copy of a locked protocol becomes unlocked.

2 To copy a protocol press on the protocol and then press "Copy selected".

3 The copy then appears in the menu and is available for editing.