

AMPLIFICATION CFX Manager™ Software Plate Quick Guide

Experiment Setup Plate Tab

The Plate tab displays a preview of the plate loaded in the Experiment Setup window (Figure 1).

Click **Create New** to open the Plate Editor to create a new plate.

Click **Select Existing** to launch the file browser to load a plate file to use in an experiment or to edit.

Use the Express Load drop-down menu to directly load a plate file to use in an experiment or to edit.

Click **Edit Selected** to open the Plate Editor to edit the well contents of the selected plate.

Click the **Start Run** tab to proceed and run an experiment with the currently loaded plate.

Plate Editor

The Plate Editor is used to create a new plate or edit an existing one (Figure 2).

1. Use the Scan Mode drop-down menu on the Plate Editor toolbar to designate the data acquisition mode to be used during the experiment.
2. Click **Select Fluorophores** to indicate the fluorophores that will be used in the experiment.
3. Within the plate diagram, select the wells to load.
4. Choose the Sample Type from the drop-down menu.
5. Click on the appropriate checkbox(es) to load the fluorophore(s) in the selected wells.
6. Type the Target Name for each fluorophore (required for gene expression analysis) and press Enter, or choose from the drop-down menu.
7. Type the Sample Name (required for gene expression analysis) and press Enter, or choose from the drop-down menu.
8. For gene expression analysis, click **Experiment Settings** to assign reference targets and a control sample.

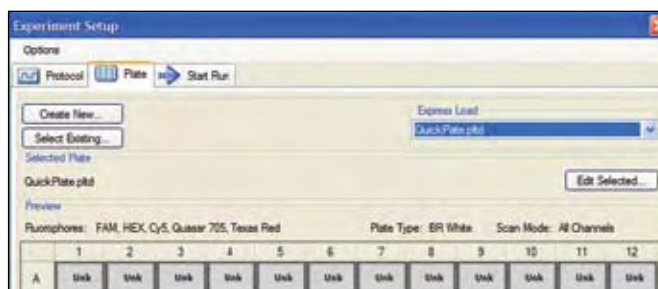


Fig. 1. Plate tab in the Experiment Setup window. Load an existing plate or create a new plate for an experiment.



Fig. 2. Plate Editor. In the plate diagram, select the wells you want to load. Use the plate editing controls to enter or edit well contents.

Entering Replicate Numbers

To designate a set of replicate wells, highlight the wells and type or choose a replicate number in the Replicate # box in the plate editing controls (Figure 3). Alternatively, to assign replicate numbers to several well subsets at once:

1. Select wells in the plate diagram and click **Replicate Series**. The Replicate Series editing window opens (Figure 3).
2. Enter the Replicate Group Size and the Starting Replicate #.
3. Indicate whether replicates are loaded horizontally or vertically.
4. Click **Apply** to enter the replicate numbers.

Creating a Standard Curve

To enter the starting target concentration of one standard, select the wells loaded with Sample Type/Standard, enter a value under Concentration in the plate editing controls (Figure 4), designate All or a specific fluorophore, and then click the **Load** checkbox. Alternatively, to enter concentrations for the entire standard curve series at once:

1. Select the wells that have also been assigned consecutive replicate numbers and click **Dilution Series**. The Dilution Series window opens (Figure 4).
2. Enter the Starting Concentration of the dilution series.
3. Enter the numbers of the first and last replicates in the series.
4. Enter the Dilution Factor and indicate whether the dilution is increasing or decreasing (that is, whether the value entered in Step 2 is the lowest or highest concentration).
5. Click **Apply** to assign the dilution series.

Creating Well Groups

To create well groups that are analyzed independently:

1. Click the **Well Groups** button on the Plate Editor toolbar. The Well Groups Manager window opens (Figure 5).
2. Click **Add** to create a new group.
3. In the plate diagram, select the wells that will constitute the well group.
4. Click **OK** to return to the Plate Editor window.

Cy is a trademark of GE Healthcare. Quasar is a trademark of Biosearch Technologies, Inc. Texas Red is a trademark of Invitrogen Corporation.

Bio-Rad's real-time thermal cyclers are licensed real-time thermal cyclers under Applera's United States Patent No. 6,814,934 B1 for use in research and for all other fields except the fields of human diagnostics and veterinary diagnostics.

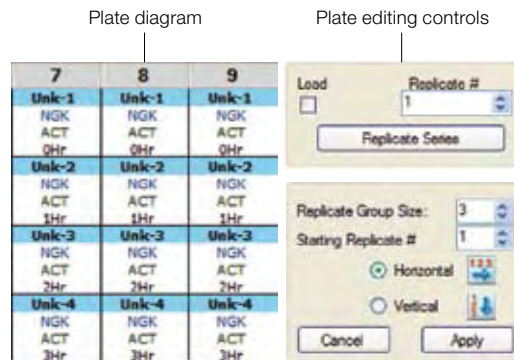


Fig. 3. Replicate Series editing window opens in the plate editing controls.

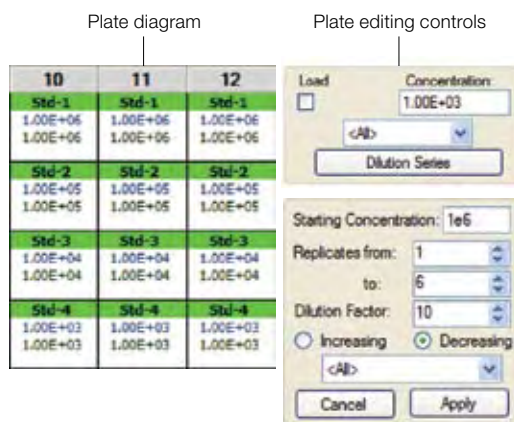


Fig. 4. Dilution Series window for creating a standard curve opens in the plate editing controls.

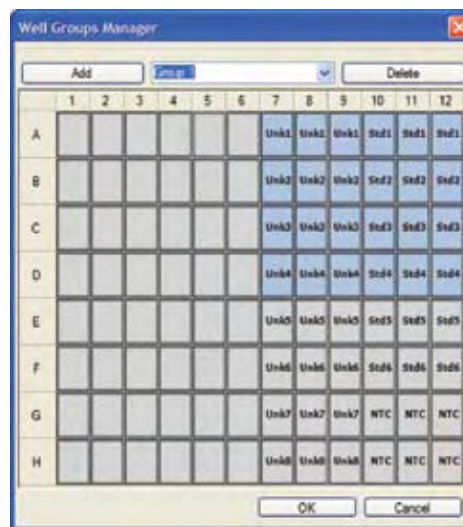


Fig. 5. Well Groups Manager window.



**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site www.bio-rad.com USA 800 4BIORAD Australia 61 02 9914 2800 Austria 01 877 89 01 Belgium 09 385 55 11 Brazil 55 21 3237 9400 Canada 905 364 3435 China 86 21 6426 0808 Czech Republic 420 241 430 532 Denmark 44 52 10 00 Finland 09 804 22 00 France 01 47 95 69 65 Germany 089 318 84 0 Greece 30 210 777 4396 Hong Kong 852 2789 3300 Hungary 36 1 455 8800 India 91 124 4029300 Israel 03 963 6050 Italy 39 02 216091 Japan 03 6361 7000 Korea 82 2 3473 4460 Mexico 52 555 488 7670 The Netherlands 0318 540666 New Zealand 0508 805 500 Norway 23 38 41 30 Poland 48 22 331 99 99 Portugal 351 21 472 7700 Russia 7 495 721 14 04 Singapore 65 6415 3188 South Africa 27 861 246 723 Spain 34 91 590 5200 Sweden 08 555 12700 Switzerland 061 717 95 55 Taiwan 886 2 2578 7189 United Kingdom 020 8328 2000