

# AMPLIFICATION

# CFX Manager™ Software

## Plate Quick Guide

### Run Setup Plate Tab

The Plate tab displays a preview of the plate loaded in the Run 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 a run or to edit.

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

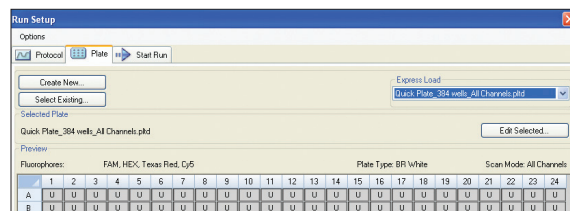
Click **Edit Selected** to open the Plate Editor to edit the well contents of the selected plate.

Click the **Start Run** tab to proceed and start a run with the currently loaded plate.

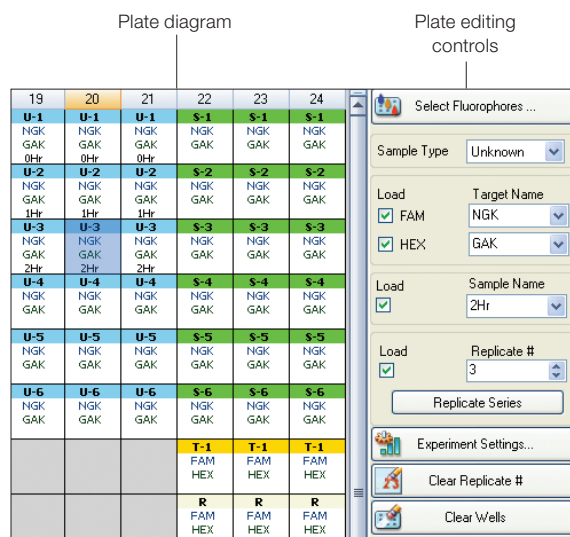
### Plate Editor

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 run.
2. Click **Select Fluorophores** to indicate the fluorophores that will be used in the run.
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. To enter the Biological Set Name, select **Tools > Show Biological Set Name**. Type in the name or choose from the drop-down menu.
9. For gene expression analysis, click **Experiment Settings** to assign reference targets and a control sample.



**Fig. 1. Plate tab in the Run Setup window.** Load an existing plate or create a new plate for a run.



**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.

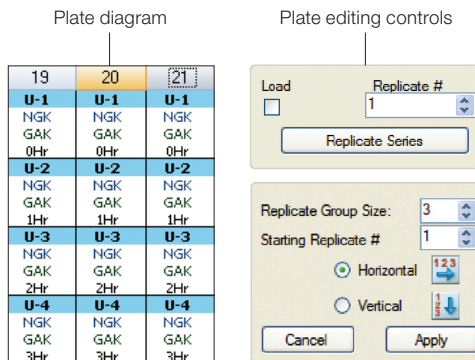


Fig. 3. Replicate Series editing window opens in the plate editing controls.

### 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.

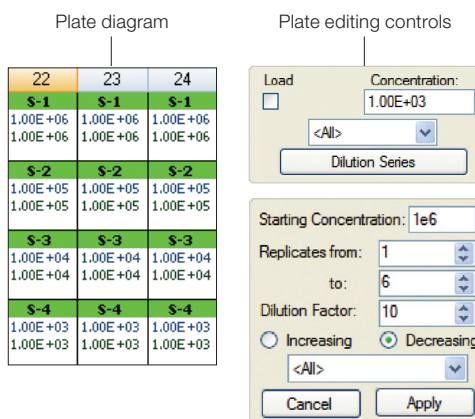


Fig. 4. Dilution Series window for creating a standard curve opens in the plate editing controls.

### 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.

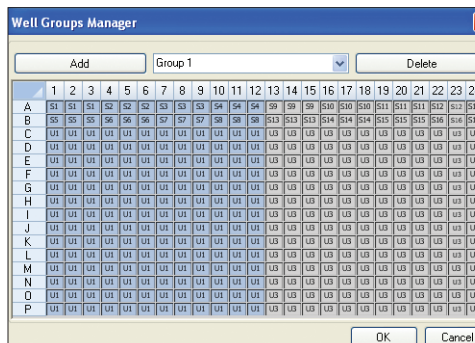


Fig. 5. Well Groups Manager window.

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