

AMPLIFICATION CFX Manager[™] Software <u>Plate Quick Guide</u>

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 dropdown 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 dropdown menu in the Plate Editor toolbar to designate the data acquisition mode to be used during the run.
- 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 dropdown menu.
- 5. Click 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 one from the dropdown menu.
- 7. Type the Sample Name (required for gene expression analysis) and press **Enter**, or choose one from the dropdown menu.
- 8. To enter the Biological Set Name, check **Biological Set** in the View box at the bottom of the data analysis window.
- 9. For gene expression analysis, click **Experiment Settings** to assign reference targets and a control sample.

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

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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 in 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.

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For more information, visit www.bio-rad.com/web/ampSW384plate.



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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.