

# AMPLIFICATION

## CFX Manager™ Software

### Data Analysis Quick Guide

#### Quantitation Tab Data Viewing

The amplification chart displays traces of the relative fluorescence collected from each well at every cycle of the experiment.

Choose the fluorophore data you want to display by clicking the fluorophore checkboxes located under the amplification chart (Figure 1).

Click on wells, rows, or columns in the well selector (Figure 1) to display fluorescence traces and data for selected wells. Selected wells are blue; unselected wells are light gray.

Position the cursor over a fluorescence trace, over a well in the well selector (Figure 1, well 4A), over a cell in the data spreadsheet, or over a point on the standard curve to highlight corresponding information in all four locations.

#### Data Analysis Options

The software uses two modes for threshold cycle, C(t), determination: derivative and single threshold. Select

**Settings** from the menu bar, and then select **C(t)**

**Determination** to change the determination method.

In the Single Threshold mode, click and drag the threshold line to manually position the line.

CFX Manager software automatically subtracts the baseline from well data. Select **Settings** from the menu bar, and then select **Baseline Threshold** to change the baseline range for any well.

Click the **View/Edit Plate** icon on the toolbar to edit well contents; create well groups; and add, remove, or exclude wells from analysis.



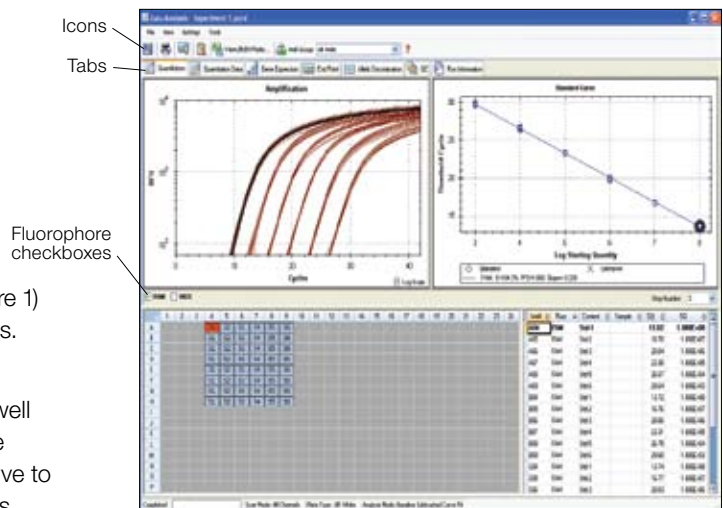
#### Chart Options

Right click on any chart to copy or save the image, or to select **Chart Options** to modify the chart (Figure 2).

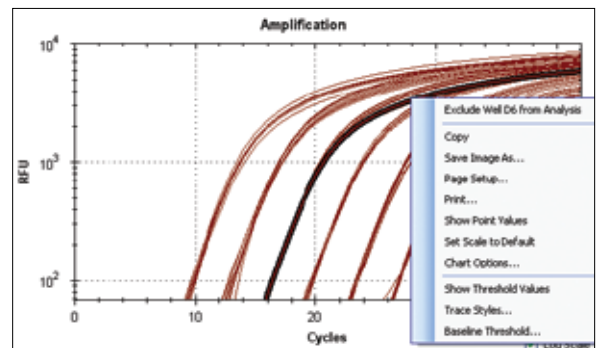
Click the **Trace Styles** icon on the toolbar or right click on any chart to customize the trace colors for specific wells.



Left click on any chart, then hold down and drag the cursor to zoom in.



**Fig. 1.** Quantitation tab in the Data Analysis window shows FAM data for all wells; information for well 4A is highlighted. Tab includes (counterclockwise from top left) the amplification chart, well selector, data spreadsheet, and standard curve.



**Fig. 2.** Pop-up menu revealed by right clicking on the amplification chart.

### Well Group Data Viewing

Use the Select Well Group drop-down menu on the toolbar to view data for a specific well group (Figure 3). The software treats well groups as independent experiments, and each can be analyzed with its own settings and, if applicable, with its own standard curve.

### Quantitation Data Tab

#### Display Options

Click the **Quantitation Data** tab in the Data Analysis window to view numerical data calculations and statistics, including C(t), for each well and the mean and standard deviation for replicates (Figure 4).

Click on any column header to sort rows based on that column. Right click on the spreadsheet and select **Sort** to sort rows based on multiple columns.

Left click on any column header and drag the column to the left or to the right to rearrange the order of the columns in the spreadsheet.

Right click on the spreadsheet, and select to export data as text, XML, or Microsoft Excel file (Figure 4).

Select **Plate** from the drop-down menu under the **Quantitation Data** tab to display well data for a selected fluorophore in a plate grid format.

### Creating a Report

#### Display Options

Click the **Report** icon on the toolbar of the Data Analysis window (Figure 1) to open the Report window (Figure 5).



Report options list

Click checkboxes in the report options list to include specific information in the report, which is displayed in the preview section (Figure 5).

Click **File** on the toolbar and select **Save** to save the report as a PDF or select **Print** to print the report.

Save the report template for use with other data files, if desired.

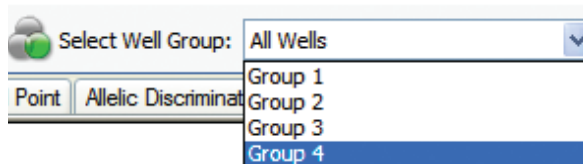


Fig. 3. Well group selection.



Fig. 4. Quantitation data tab. Inset, pop-up menu is revealed by right clicking on spreadsheet.

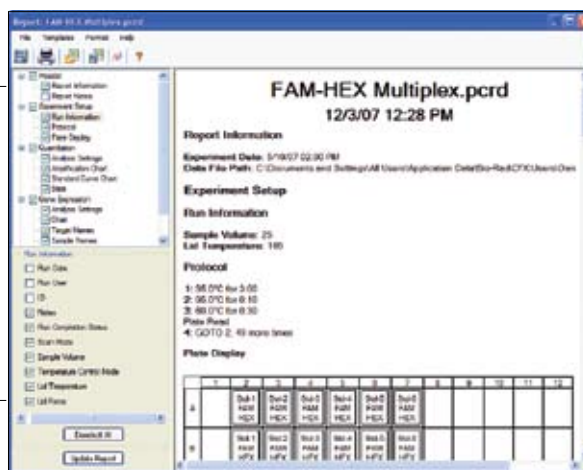


Fig. 5. Report window. Report options list includes checkboxes for choosing information to include in report.

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