

IN Carta software View, classify and export results

Navigate the data table

- Use the Target () drop-down to select what target data to display.
- Use the **View** 2 drop-down to select the aggregation method:
 - Single Target: measures for each segmented object in the selected field-of-view (FOV).
 - Summary by FOV: average values for each FOV.
 - Summary by Well: average values for each well.
- The **Results** I drop-down displays prior results for the current data set. Results are identified by protocol, data set name, and date/ time. Select prior results from the drop-down to reload them.

Plate

Using the Chart Dashboard Panel

The Chart Dashboard Panel is a quick and easy way to display summary or cell by cell data graphically.

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Here are the most commonly used visualization tools and actions:

- 1. Use the **Data Selection** 1 buttons in the **Chart Dashboard** to view Plate, Well or FOV data.
- 2. Select the **Chart Type** 2 in the Chart Dashboard. Note: Not all chart types are available with all data selections. See table at right for more information.
- 3. Select chart parameters:
 - The Histogram 🔝 displays cell count for a single measure.
 - a. Use *Target* 1 and *Measures* 2 drop-downs to change the data displayed.
 - b. Adjust Data Bins 3 as needed. Valid entries are 1 to 99.
 - c. Click and drag over an area of the histogram 4 to zoom in on that portion of the graph **5**. Click **Reset zoom 6** to return to the default display.
 - The Scatter Plot *Li* displays cell by cell data for a single FOV.
 - a. Use Target 1 and Measures 2 drop-downs to specify data to be plotted on the x- and y-axes.
 - b. Click and drag over an area of the scatter plot to zoom in on a particular area of the graph. Click the *Reset zoom* button to return to the default display.
 - The *Heat Map* displays average data for a single measure from each well.
 - a. Use Targets/Classes and Measures drop-downs to change the data displayed.
 - b. Click and drag the arrows at the top and bottom of the Heat Map Slider to adjust min/max scaling.

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Summary by Well



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View linked data

- IN Carta software enables users to interactively connect data points back to a segmented object. This allows you to explore outliers, trends, and perform visual quality control on analyzed data.
- From the Chart Dashboard, set Data Selection to FOV (1) and Chart Type to Scatter Plot .
- Use drop-downs to select *Target* and *Measures* (2) for the x- and y-axes.
- In the Data Table, set Target to Linked Target (3) and View to Single Target (4).
- Verify that the *View Port* is displaying the target identified in the *Scatter Plot* and that *Target Masks* are turned on **5**.
- Click on a point in the Scatter Plot 6, cell in the image 7, or row in the Data Table 3 to highlight corresponding data for that particular object.



Classify data

- The **Classification** window is composed of the **Classes** navigation panel **1** and the **Histogram 2**. As classes are added to the **Histogram**, the **Classes** navigation panel will display relationships between parent and daughter classes.
- 1. From the Chart Dashboard, click Classifier (9).
- In the Classification window, select Target 3 and Measures 4 to use for classification.
- Click the + 5 icon to add a gate to the histogram. Move the gate 6 horizontally to reposition. Up to five gates can be added to a single node.
- 4. In the *Classes navigation panel*, click on the *Pencil* icon to edit parent and daughter class names.
- Double-click a node 7 in the Classes navigation panel to reload the histogram for that class alone. Use the + 5 icon to add daughter classes for this node.
- 6. When classification is complete, click **Save** 8 to classify data.

Export Measurements

- 1. Click on *Download Results* in the upper right hand corner of the data table panel.
- 2. In the *Download Data* window, choose the *Data Type* to export.
 - All Data will export cell by cell measurements AND summary data.
 - Summary will export only summary data (FOV and whole well averages).
- 3. Click **Download**. Results will be saved to the Downloads folder as a single zip file.



