![MOLECULAR DEVICES logo]

IN Carta Image Analysis Software

QUICK REFERENCE GUIDE

Viewing, Classifying, & Exporting Results

Navigating the Data Table

- Use the **Target (1)** 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 (3)** 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.

Using the Chart Dashboard Panel

The **Chart Dashboard Panel** is a quick and easy way to display summary or cell by cell data graphically. Here are the most commonly used visualization tools and actions:
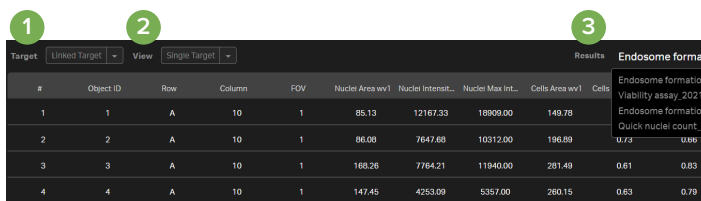
1. Use the **Data Selection (4)** buttons in the **Chart Dashboard** to view **Plate**, **Well** or **FOV** data.

2. Select the **Chart Type (5)** in the Chart Dashboard.
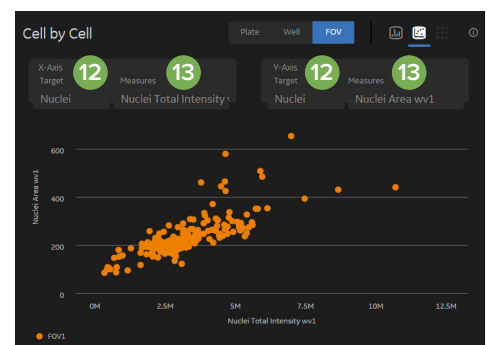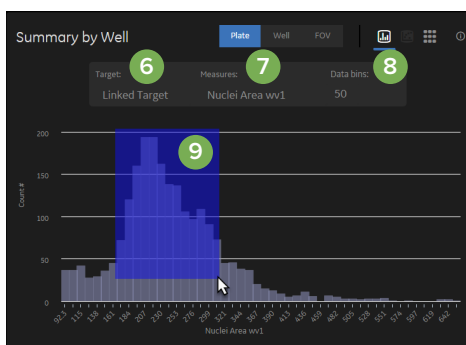
   Note: Not all chart types are available with all data selections. See table at bottom for more information.

3. Select chart parameters:

    - The **Histogram** 📊 displays cell count for a single measure.

        a. Use **Target (6)** and **Measures (7)** drop-downs to change the data displayed.

        b. Adjust **Data Bins (8)** as needed. Valid entries are 1 to 99.

        c. Click and drag over an area of the histogram **(9)** to zoom in on that portion of the graph **(10)**. Click **Reset zoom (11)** to return to the default display.

    - The **Scatter Plot** 📈 displays cell by cell data for a single FOV.

        a. Use **Target (12)** and **Measures (13)** 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.


	📊	📈	▦
Plate	✓		✓
Well	✓		
FOV	✓	✓	

- 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.

Viewing Linked Data

The 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.

1. From the *Chart Dashboard*, set *Data Selection* to *FOV* (14) and *Chart Type* to *Scatter Plot* 📈.
2. Use drop-downs to select *Target* and *Measures* (15) for the x- and y-axes.
3. In the *Data Table*, set *Target* to *Linked Target* (16) and *View* to *Single Target* (17).
4. Verify that the *View Port* is displaying the target identified in the *Scatter Plot* and that *Target Masks* are turned on (18).
5. Click on a point in the *Scatter Plot* (19), cell in the image (20), or row in the *Data Table* (21) to highlight corresponding data for that particular object.
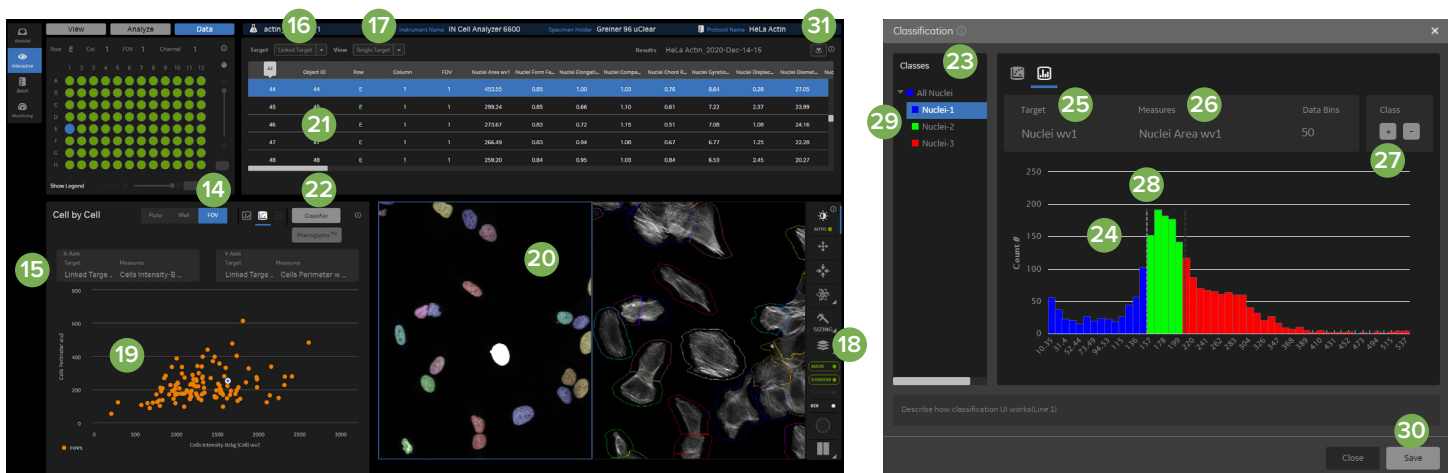
Classifying Data

The *Classification* window is composed of the *Classes* navigation panel (23) and the *Histogram* (24). 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* (22).
2. In the *Classification* window, select *Target* (25) and *Measures* (26) to use for classification.
3. Click the + (27) icon to add a gate to the histogram. Move the gate (28) 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.
5. Double-click a node (29) in the *Classes navigation panel* to reload the histogram for that class alone. Use the + (27) icon to add daughter classes for this node.
6. When classification is complete, click *Save* (30) to classify data.

Exporting Measurements

1. Click on *Download Results* ✉ (31) 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.