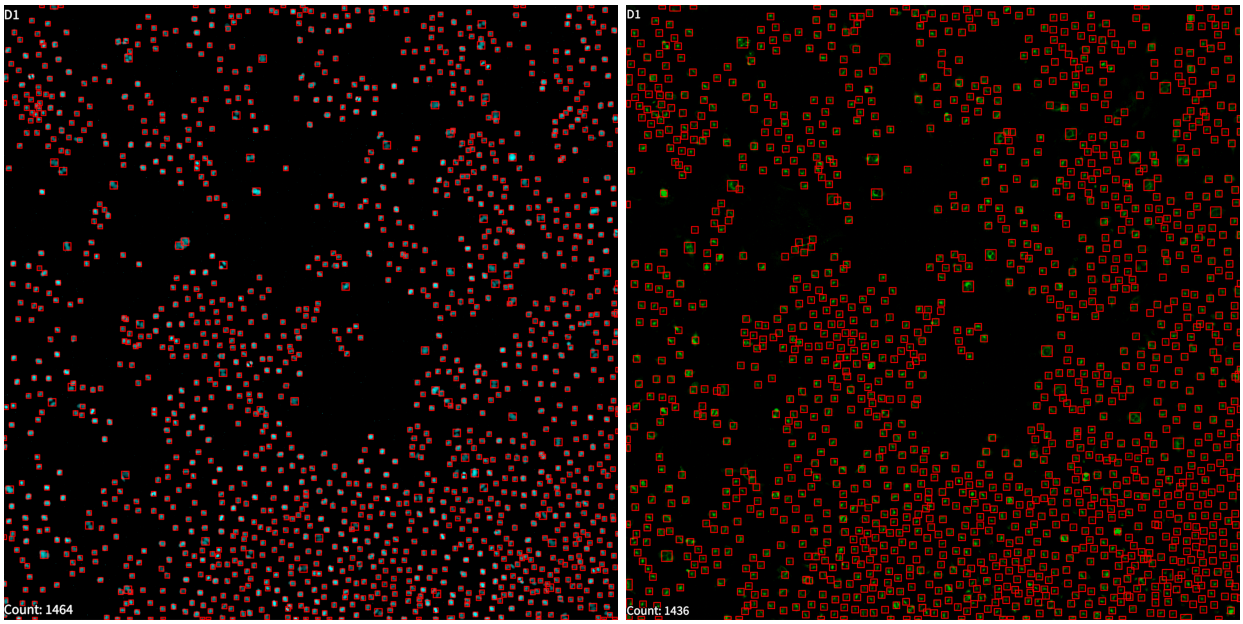
Analysis

Available in the **MCAM Viewer Software**.

Cell Counting Analysis

The cell counting analysis allows users to count the numbers of bright cells on a dark background, for example, the number of the DAPI-nuclear stained cells. It counts the number of cells within each field of view and outputs a csv of the number of cells in each field of view. This analysis is compatible with 96-, 384-, and 1536-well plates. Cell counting works best for binary datasets with high contrast.



Counting DAPI and GFP Cells

Step	Function
1	**Load the well plate** onto the Vireo.
2	**Capture an XYZC stack** at 4x or 10x magnification, optimally in the DAPI - 380nm fluorescence channel and Laplacian projection.
3	**Open the acquired dataset** in the MCAM Viewer software.
4	**Go to Assays > Cell Counting.** A panel will open on the right.

5	**Input minimum and maximum cell radii** in um (you can measure cell radius by using the circle tool under “Tools”).
6	**Click “Detect Cells”** to run the analysis.
7	**Analysis results are displayed** on the screen **and saved** in a folder named “cell_count_analysis_results” in the dataset’s folder. Two files are generated, “analysis_metadata.nc” file containing the analysis results and a csv file summarizing the cell count on a per well basis.