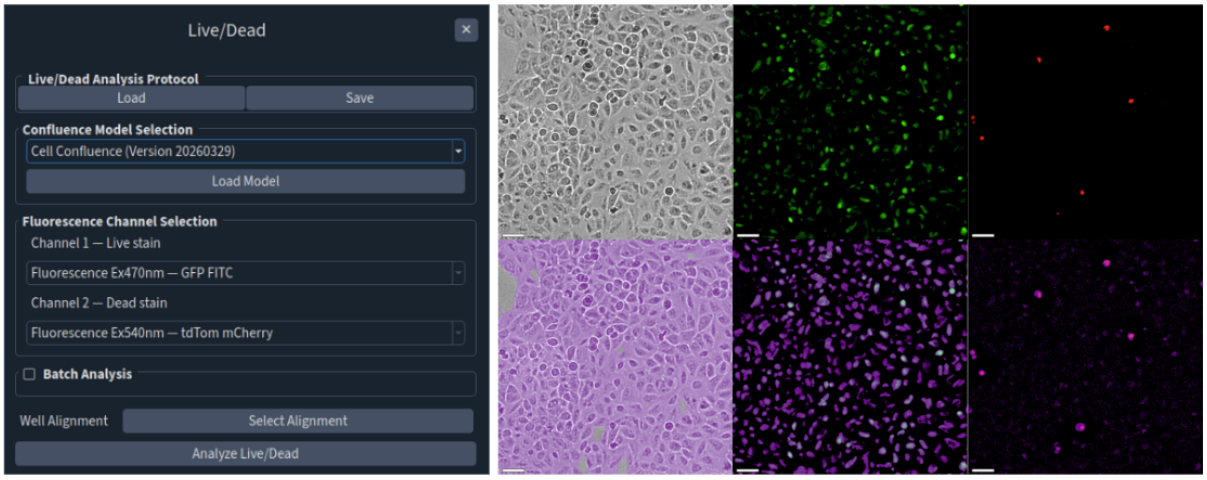
Live/Dead Assay (Beta*)

The Live/Dead Assay reports the proportion of dead cells over total cells, live cells over total cells, and dead cell to live cell ratio by area based on fluorescent staining of live and/or cells. This assay is useful for studies in measuring general cell death.



Binary masks (purple) overlaying total cell area in the bright-field channel, GFP channel (live cells) and mCherry channel (dead cell nuclei) within the threshold range defined through dynamic fluorescence thresholding. Scale bar: 60um.

Step	Function
1	**Open an acquired dataset** in the MCAM™ Viewer software. *The image dataset has to be taken in bright-field and 2 fluorescence (DAPI, GFP, or tdTom/mCherry) channels for live and dead cell stains.
2	**Navigate to Assays > Live/Dead.** A panel will open on the right.
3	**Select the appropriate Confluence model** for brightfield cell quantification.
4	**Select the correct channels for Live and Dead cell stains.**
5	**Click "Analyze Live/Dead"** to run the analysis.
7	The results are saved in a folder named "live_dead_analysis_results" in the parent folder of the analyzed dataset. A csv file is generated summarizing the quantification of area(s) of cells in the bright-field channel, the fluorescence areas in the GFP and mCherry channels, and the percentages of dead cell areas over total cell areas, dead cell areas over live cell areas, and live cell areas over total areas, on a per field of view or per well basis. A subfolder is created where images with masks indicating the areas calculated are included.

*Available to select users upon request. Please talk to Ramona's representatives.