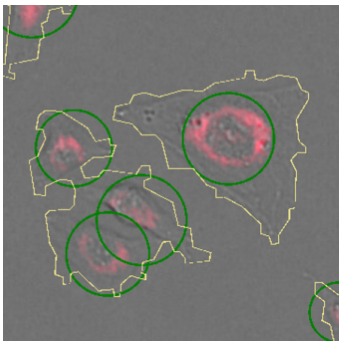
Cell Confluence (Dots 1F)

GENERAL PURPOSE

The Cell Confluence (Dots 1F) analysis algorithm can be used in an end point assay or in live cell imaging, where a confluent cell layer is analyzed in a brightfield image and one other events in a fluorescence image. These additional events (e.g. marked cell defects due to toxicity or detected CD-marker) are counted, if they occur, and the results are calculated with respect to the cell confluence area.

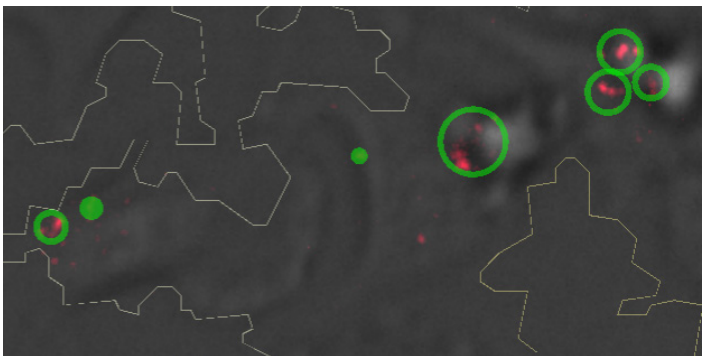


RESULT TABLE

Fluo Objects on BF Area / BF Area	Number of cell areas in the fluorescence image with respect to the detected cell area in the brightfield image
Cell Area BF	Area covered with cells in the brightfield image in mm^2
Cell Confluence BF	Percentage ratio of the cell area detected in the brightfield image with respect on the whole evaluated area
Cell Area Count BF	Number of isolated cell areas in the brightfield image
Cell Area Fluo	Area covered with cells or sub parts of cells in the fluorescence image in mm^2
Cell Area Count Fluo	Number of isolated cell areas in the fluorescence image
Fluo Objects on BF Area	Number of distinct cell areas in the fluorescence image that overlap cell areas in the brightfield image
Avg Fluorescence Intensity BC	Average fluorescence intensity of all detected cell areas in the fluorescence image

EXAMPLE

SiRNA detection (green marked events in the overlaid red fluorescence image) in a viable confluent cell layer (brightfield image). The light yellow line shows the confluence detection in brightfield, red circles would mark fluorescent events outside the cell area.



SYNENTEC GmbH
Otto-Hahn-Str. 9A
25337 Elmshorn/Germany
Phone. +49 (0) 4121 46311-0
Email. appsupport@synentec.com

www.synentec.com