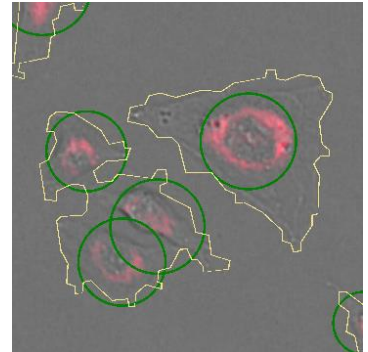


Cell Confluence (Dots 1F)

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.



Short Note
SN-B1-30-XV-04

Result Table

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

Example

SiRNA detection (green marked events in the overlaid red fluorescence image) in a viable confluent cell layer (brightfield image).

