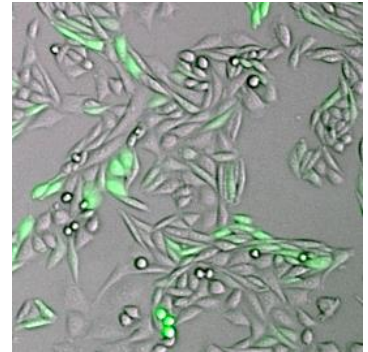


Confluence (1F)

General Purpose

The Confluence (1F) image analysis tool is used to determine fluorescent areas within an analyzed brightfield region and the ratio between them. The image analysis uses one brightfield and one fluorescence image in a sequence way. First of all the image analysis will decline the area covered by cells in brightfield followed by an analysis procedure that examine these regions for fluorescence. This can, for example, be very helpful in determining the transfection efficiency.



Short Note
SN-B120-XVII-04

Read-Out Data

- | | |
|--------------------------------------|---|
| • <i>Cell Confluence BF</i> | <i>Percentage of Cell Area in BF on Evaluated Area</i> |
| • <i>Cell Confluence Fluo</i> | <i>Percentage of Cell Area in fluorescence on Evaluated Area</i> |
| • <i>Cell Confluence BF AND Fluo</i> | <i>Percentage of Cell Area BF AND Fluo on Evaluated Area</i> |
| • <i>Cell Confluence BF only</i> | <i>Percentage of Cell Area in BF (without fluorescence) on Evaluated Area</i> |
| • <i>Cell Confluence Fluo only</i> | <i>Percentage of Cell Area in fluorescence (without BF) on Evaluated Area</i> |
| • <i>BF AND Fluo Area / BF Area</i> | <i>Area covered in brightfield AND fluorescence with respect to the detected cell area in the brightfield image</i> |
| • <i>Cell Area BF</i> | <i>Area covered with cells in brightfield</i> |
| • <i>Cell Area Count BF</i> | <i>Number of separate cell clusters in brightfield</i> |
| • <i>Cell Area Count Fluo</i> | <i>Number of separate cell clusters in fluorescence</i> |
| • <i>Cell Area BF AND Fluo</i> | <i>Area covered with cells in brightfield AND fluorescence (coincidence)</i> |
| • <i>Cell Area BF only</i> | <i>Area covered with brightfield only</i> |
| • <i>Cell Area Fluo only</i> | <i>Area covered with fluorescence only</i> |
| • <i>Avg Fluo Intensity BC</i> | <i>Average fluorescence intensity of all detected cell areas in the fluorescence image</i> |

Example

This example shows a GFP Co-Transfected CHO cell line. The benefit of this application is to figure out the best way of a transfection procedure and offers a monitor tool for the stability of your clones. It is possible to use a "multi measurement" experiment and display the results chosen in a timed graph that represents all time variations of the assay results.

