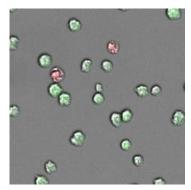


Suspension Cell Count (2F)

General Purpose

Suspension Cell Count (2F) is an application with one brightfield channel to identify all suspension cells and two fluorescence channels to distinguish between four different populations. These two functional fluorescence markers can be chosen according to your biological demands e.g. for live/dead or apoptosis tests.



Short Note SN-B240-XVII-04

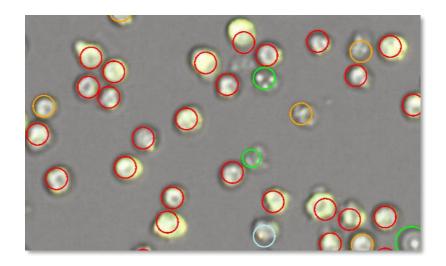
Result Table

| • | TC-BF [#] | Total number of cells detected in the brightfield channel |
|---|-------------------|--|
| • | TC-1F [#] | Total number of cells detected in the 1st fluorescence channel |
| • | TC-2F [#] | Total number of cells detected in the 2nd fluorescence channel |
| • | TC-nn [#] | Total number of cells without fluorescence in both channels |
| • | TC-pn [#] | Total number of cells with fluorescence only in the 1st channel |
| • | TC-np [#] | Total number of cells with fluorescence only in the 2nd channel |
| • | TC-pp [#] | Total number of cells with fluorescence in both channels |
| • | TC-nn percent [%] | Percentage of cells without fluorescence in both channels |
| • | TC-pn percent [%] | Percentage of cells with fluorescence in only the 1st channel |
| • | TC-np percent [%] | Percentage of cells with fluorescence in only the 2nd channel |
| • | TC-pp percent [%] | Percentage of cells with fluorescence in both channels |
| • | CD-1F [#/mL] | Number of cells labeled with Fluorescence 1 per mL |
| • | CD-2F [#/mL] | Number of cells labeled with Fluorescence 2 per mL |
| • | 1F/BF [%] | Fluorescence ratio: (TC-1F/TC-BF)* 100 |
| • | 2F/BF [%] | Fluorescence ratio: (TC-2F/TC-BF)* 100 |
| • | | 'Undiluted' volume of your sample Cell density = Total number of cells per mL Average fluorescence intensity in channel 1 over background Average fluorescence intensity in channel 2 over background |
| | | |



Example

This example shows a B- lymphocyte cell line. To check the apoptotic rate they were stained with JC-1. This dye is a mitochondrial membrane potential marker. JC-1 green marks dead cells and red J-aggregates were build in viable cells.



Marked green = TC-nn → detected in brightfield only

Marked orange = TC-pn \rightarrow detected in brightfield <u>AND</u> in fluorescence 1 Marked light blue = TC-np \rightarrow detected in brightfield <u>AND</u> in fluorescence 2

Marked red = TC-pp → detected in brightfield AND in fluorescence 1 AND in fluorescence 2