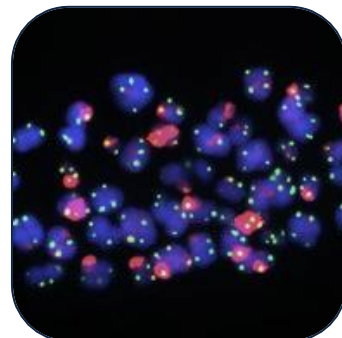


Nuclei Real Dot Count (2F)

General Purpose

The Nuclei Real Dot Count (2F) analysis algorithm is to be used in an end point assay, where cell nuclei are counted in a first fluorescence image (based e.g. on DAPI staining) and further stained sub structures (e.g. DNA string breaks in combination with mitosis marker or telomere staining) in two further fluorescence images. The stained sub structures are counted and analyzed on each cell nucleus area and their number and average intensities are stored as additional cell nuclei attributes.



Short Note
SN-F3-44-XV-02

Result Table

• Nuclei Dot F1 positive	<i>Number of cell nuclei, that own at least the desired number of sub structures („Dots“) in the first additional fluorescence image</i>
• Nuclei Dot F2 positive	<i>Number of cell nuclei, that own at least the desired number of sub structures („Dots“) in the second additional fluorescence image</i>
• Nuclei Dot F1 positive percent	<i>Percentage ratio of Nuclei Dot F1 positive counts with respect to the Nuclei Count</i>
• Nuclei Dot F2 positive percent	<i>Percentage ratio of Nuclei Dot F2 positive counts with respect to the Nuclei Count</i>
• Nuclei Count	<i>Number of recognized cell nuclei</i>
• Cell Area Count Fluo 1	<i>Number of recognized sub structures in the first additional fluorescence image</i>
• Cell Area Count Fluo 2	<i>Number of recognized sub structures in the second additional fluorescence image</i>

- **Avg Nucleus Fluorescence Intensity BC** *Average fluorescence intensity of a cell nucleus over background level*
- **Avg Fluo CH1 Intensity BC** *Average fluorescence intensity of a the cell sub structures in the first additional fluorescence image over background level*
- **Avg Fluo CH2 Intensity BC** *Average fluorescence intensity of a the cell sub structures in the second additional fluorescence image over background level*
- **Sum of Nuclei Sizes** *Total area of all recognized cell nuclei*
- **Sum of the Nuclei Fluorescence Intensities BC** *(intermediate result)*
- **Sum of Fluo Intensity CH1** *(intermediate result)*
- **Sum of Fluo Intensity CH2** *(intermediate result)*
- **Avg Nucleus Size** *Average Size of a cell nucleus*
- **Evaluated Area** *Total evaluated area*
- **Process Duration** *Duration of image analysis [ms]*
- **Processed Area** *Percentage ratio of Evaluated Area on entire well area*