

WimCytotoxicity

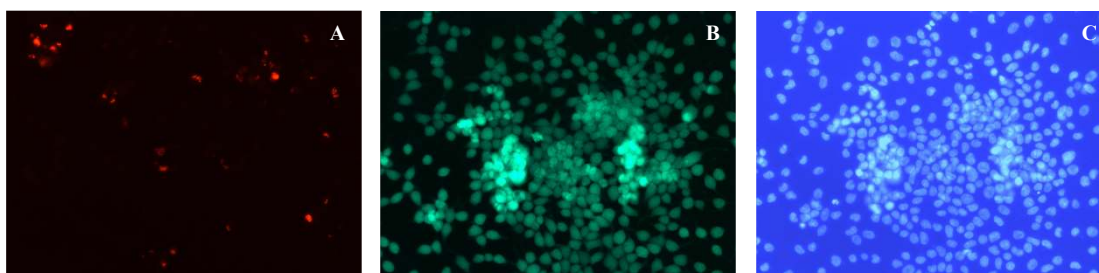
Image Analysis for Cytotoxicity Assays



The use of fluorescent dyes to assess cellular viability under the effect of cytotoxic agents is an extended practice in different fields of the cell biology. It is a key assay in outstanding researches, such as the determination of the cytotoxic potential of new drug compounds, the study of cell-mediated cytotoxicity or the evaluation of the effects of cytotoxic pollutants in cells.

WimCytotoxicity tool is designed to generate an objective and reproducible quantification of cytotoxicity in fluorescence microscopy images of cell cultures. The quantification is based on the detection of the whole cell population and the identification on it of the cells affected by the cytotoxic agents. This recognition is possible thanks to our fast high-end image processing algorithms, which allows an accurate analysis of the cell cultures in record time.

WimCytotoxicity uses as input fluorescence microscopy images with two different dyes: one dye for the viable cell population and another one for the cytotoxicity-affected cells. Optionally, an extra nuclear dye can be applied to stain cellular nuclei, which will improve the accuracy of the cell detection algorithm.



Cytotoxicity sample images granted by Roche Applied Science. Cells transfected using X-tremeGENE Transfection Reagent were stained with (A) Propidium iodide, (B) Calcein AM and (C) Hoechst.

WimCytotoxicity tool provides the following output data per image analyzed:

- Total cell count: total number of cells in the culture.
- Count of cells stained by the cytotoxicity fluorescent marker: total number of toxic cells.
- Percentage of cells stained by the cytotoxicity fluorescent marker: percentage of toxic cells in the cell population.

Try WimCytotoxicity tool for free at mywim.wimasis.com and experience for yourself the easy cytotoxicity quantification.

Because every research is unique, WimCytotoxicity tool is engineered with the flexibility to adapt to the needs of every researcher. If your cytotoxicity assay does not fit the requirements above, send us a quick note or reach us at:

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