

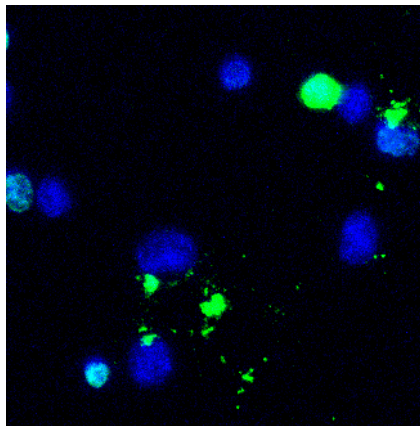
# WimTUNEL

Image Analysis for TUNEL Assay



The study of the mechanisms that lead to DNA damage and their consequences is an invaluable source of information for a better understanding of human disease. The use of TdT-mediated dUTP nick end labeling (TUNEL) staining to assess this process is an extended practice in the study of apoptosis, necrosis and other DNA-damage related processes. Its effectiveness favors the screening of large batches of cell cultures with the aid of an image processing solution.

Wimasis TUNEL Assay tool is designed to generate objective and reproducible quantification of cell DNA damage 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 marked by the TUNEL stain reagents. This recognition is possible thanks to our fast high-end image processing algorithms, which allow an accurate analysis of the cell cultures in record time.



Autophagy assay image granted by the The Biological Research Centre (CIB), of the Spanish National Research Council (CSIC).

Wimasis TUNEL assay uses as input fluorescence microscopy images with two different dyes: one nuclear or cytoplasmic membrane dye for the whole cell population and another marker for the TUNEL stain. If a cytoplasmic membrane dye is used, an extra nuclear dye can be applied to stain cellular nuclei, which will improve the accuracy of the cell detection algorithm.

This image analysis tool provides the following output data for each analyzed image:

- Total cell count: total number of cells in the image.
- Count of TUNEL-stained cells: total number of TUNEL-stained cells in the image.
- TUNEL-stain ratio: percentage of TUNEL-stained cells in the cell population.

Try Wimasis TUNEL Assay tool for free at [mywim.wimasis.com](http://mywim.wimasis.com) and experience for yourself the easy TUNEL assay quantification.

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

[contact@wimasis.com](mailto:contact@wimasis.com) or +49 (0)89 452 44 66 50

Wimasis GmbH | Karlstraße 55 | D-80333 Munich (Germany)  
© Copyright 2009 - 2013 Wimasis GmbH. All rights reserved