

# WimTransfection

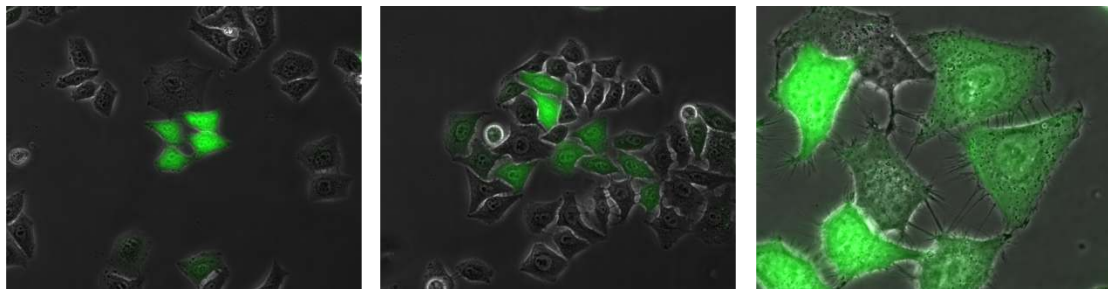
Image Analysis for Transfection Assay



Transfection is a powerful tool to study gene function and protein expression in eukaryotic cells by the introduction of nucleic acids into them and the examination of the subsequent changes occurring in cell properties. It provides the basis to investigate key aspects of genetics, like protein-protein interactions, promoter and enhancer sequences and trans-acting factors among many others. The use of fluorescent dyes to assess this process is an extended practice in different fields of the cell biology and allows the screening of large batches of cell cultures with the aid of a powerful image processing solution.

WimTransfection tool is designed to generate an objective and reproducible quantification of transfection 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 transfected cells, marked with the transfection 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.

WimTransfection uses as input fluorescence microscopy images with two different dyes: one dye for the whole cell population and another for the transfection reagent. Optionally, an extra nuclear dye can be applied to stain cellular nuclei, which will improve the precision of the cell detection algorithm and the accuracy of the results.



Transfection assay sample images granted by ibidi GmbH. HepG2 cells transfected with the Torpedo DNA Transfection Reagent (ibidi GmbH) and expressing GFP.

WimTransfection tool provides the following output data per image analyzed:

- Total cell count: total number of cells in the culture.
- Count of transfected cells: total number of cells stained by the transfection fluorescent marker.
- Transfection efficiency: percentage of transfected cells in the cell population.

Try WimTransfection tool for free at [mywim.wimasis.com](http://mywim.wimasis.com) and experience for yourself the fast transfection quantification.

WimTransfection solution is created with flexibility with the aim to adapt to the needs of every researcher. If your transfection 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