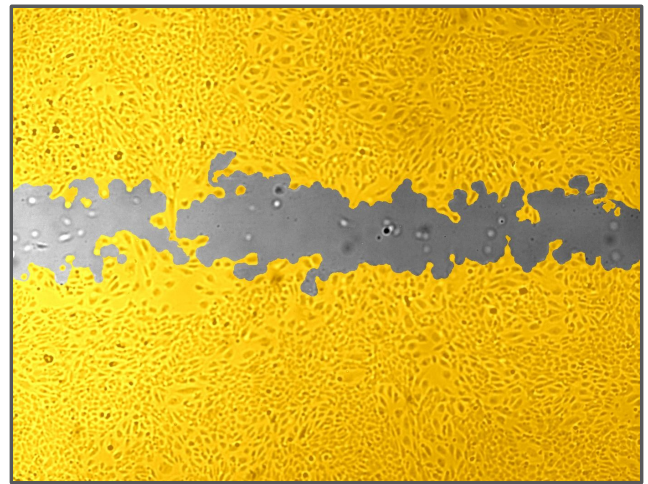
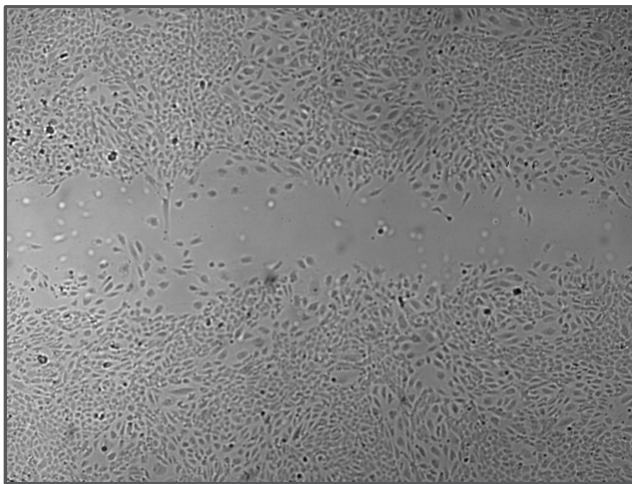


Automatic Image Analysis with S.CORE

Powerful - Flexible - Convenient

Module

Scratch Assay



Source: S. Zahler, Institute for Pharmacology, Ludwig Maximilians University, Munich

Quantify your Scratch Assay with S.CORE – the innovative web-based image analysis system

All you need is a PC with internet connection; S.CORE does not require any additional installation of hard- and software.

We establish a personalized internet portal for you, through which you can access the central analysis unit at any time. Just take your images as you are used to, with the system available in your lab. Then upload them via internet to our analysis unit. The extracted results will be available on your internet portal shortly after.

Further Information on our specific module “scratch assay” is available on the next page.

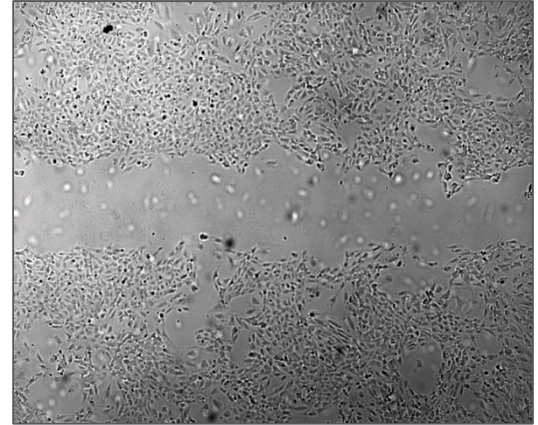
But S.CORE is even more powerful: We are happy to develop individualized solutions for automatic analysis of all kinds of assays – at an attractive price.

Further information is available under www.sco-lifescience.com.

Module

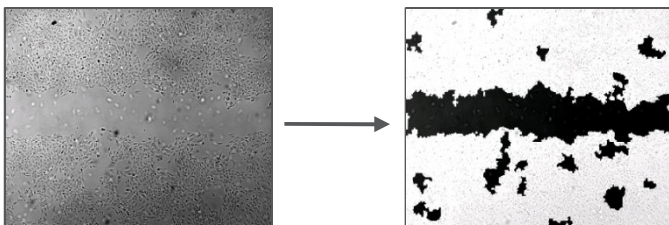
Scratch Assay

The module 'Scratch Assay' enables automatic and quantitative analysis of scratch assays. The standard output value is the relation of uncovered area to whole area. Should you require another output value, this can be achieved without major additional effort



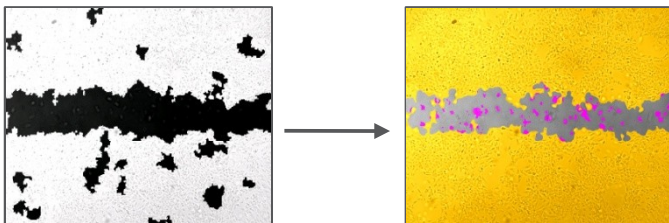
Source: S. Zahler, Institute for Pharmacology, Ludwig Maximilians University, Munich

Analytical Steps



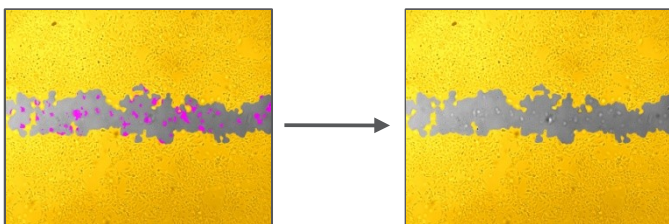
Step 1

In the first step, cellular areas are separated from background through innovative segmentation algorithms. Even artefacts like shadows or bubbles generally do not compromise the correct classification.



Step 2

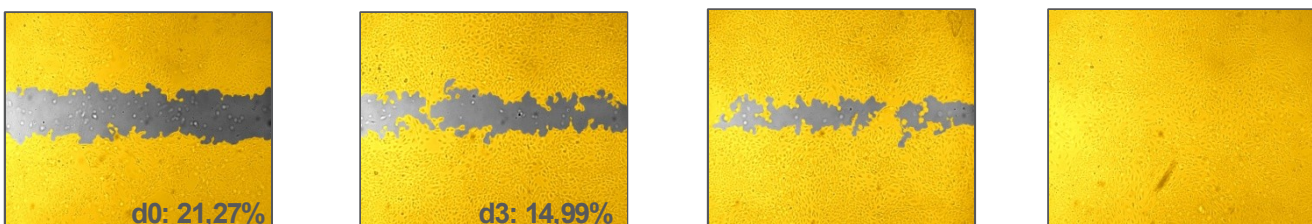
Based on an object-oriented technology, relative position, and shape of free areas are used to analyze the relationship to the scratch area. This guarantees a reasonable characterization of the scratch area



Step 3

Small cellular areas located separately within the scratch are eliminated as they cannot be considered part of the migration front. Together with the classification of step 2, only structures describing the closure of the scratch are included.*

Variation over time „scratch assay“



Scratch area in relationship to total area (in %)

*Should you require another type of classification of free areas or of individually located cellular areas, this can be realized without major additional effort.