



South Bohemian  
Research Center  
of Aquaculture  
and Biodiversity  
of Hydrocenoses

**Name of software (Czech):** Expertomica ECell

**Name of software (English):** Expertomica ECell

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## Description

The software is designed for manual time-lapse microscopy image series of cell monolayer labeling. The software brings fast and efficient way for cell cycle analysis of cell monolayer. Many statistics can outcomes from the labeling – cell cycle duration, comparison of cell states, cell cycle vocabulary. User cell state vocabulary can be created for any individual type of objects. More information can be found in video guide.

## Input Data

Directory with time-lapse microscopy image series of cell monolayer. The vocabulary with definition of the cell states.

## Output

Txt files with labeled objects. Cell pedigree for all cells in the monolayer. The statistics about – cell states (can be uploaded into Microsoft Excel).

## Installation

Download and run Expertomica ECell.exe and follow the instructions. The software will be installed into selected directory.

### **The installation contains:**

Expertomica ECell.exe – the software

Help-Expertomica ECell.pdf – help

Testing data – folder with testing data

CellCycleVocabulary – contains the vocabulary of the cell states

VideoGuide – contains video guide for the software

## Requirements

**Operation system:** Windows XP, Vista 32bits and Windows 7 32bits

## **Testing**

The directory “Testing data” contains the labeled cell monolayer. Just select the file located in Testing data\project in Menu-project-load project and you can test the software.