Protocol

Materials

- Cell culture medium
- Cell culture plates (appropriate for your experiment)
- Incubator (37°C, 5% CO2)
- Microscope compatible with SnapCyte™ Adapter
- SnapCyte™ Adapter and App

Procedure

Include both positive and negative controls in your assay!

***Cell Seeding**:*

1. Harvest and count the cells.
2. Seed cells in a cell culture plate suitable for your treatment. Adjust the density based on the cell type and assay duration.
3. Incubate the plate at 37°C in a 5% CO2 incubator to allow the cells to attach and recover.

***Treatment and initial timepoint**:*

You can use a digital microscope and upload images to our webapplication as well.

1. Treat the cells as per your experimental design.
2. Choose the Cell Proliferation Assay, define experiment conditions and press create.
3. Set up SnapCyte™ Adapter on your microscope
4. Place the culture plate on the microscope and focus on the cells.
5. In the created experiment, select Add Images and select New Timepoint.
6. Choose the appropriate group and replicate number and take snapshots using the SnapCyte™ App.
7. We recommend this sampling for various plates:

- 96-48 and 24 well plate: 2-4 images/well at 10X magnification
- 6 well and 60 cm dishes: 4-5 images/well at 10X
- 10 cm, T75 flask: 5-7 images/well at 10 X magnification

8. Repeat step 3-6 for additional timepoints if needed.

You will need less images if you use 4X magnification but you need to make sure the cells are clearly visible. We recommend 10X magnification to avoid variability in results.

Keep the number of images taken per well constant in an experiment for better consistency.

Quantification

1. The SnapCyte™ App will analyze the images and provide confluency data, which correlates with cell proliferation.
2. Use the Image Tab in the experiment to check indivudial images in your timepoints. Here you can also add/edit Regions of interest if needed.
3. Use the Graph Tab in the experiment to view graph of your data, choosing display options like Mean, Mean+SD, etc.
4. Export data for further analysis and download images for documentation and presentations.