LIFECUBE FEATURES:

- excellent long term performance
- intuitive, advanced and precise pumping system
- fits into a standard cell culture incubators (LifeCube outside dimensions: 435/448/266 mm)
- available in two variants:
- » 3 separate drawers with 2 peristaltic pumps each;
- » 1 drawer with 2 peristaltic pumps
- each drawer contains a detachable tray which you can move into a cell culture cabinet and work with it under sterile conditions
- each tray can have 1 or 2 cell culture cuvettes depending on the experimental setup
- free experiment design software
- very intuitive software that helps to design the entire experiment
- weight up to 20 kg





LIFECUBE FLEXIBLE DESIGN

LifeCube is an unique and revolutionary research equipment designed to mimic the in vivo pharmacokinetics of any drug. Nevertheless, it can be reconfigured in multiple ways to satisfy other experimental needs. Real Research keeps experimenting with new modules and features which can be added to LifeCube, like for example a fraction collector. If you have a modification in mind which you would like to see in your experiments feel free to contact us because we may already work on it.







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EMPOWERING RESEARCH

Explore the real drug pharmacokinetics in 3D cell culture

We are open to cooperation and we are looking for Innovators who will be our front line users for whom we will also provide additional support with our know-how and experience

Science EXCHANGE

labtoo

(f) 🕑 in

We are on:

Real Research Sp. z o.o. ul. prof. Michała Bobrzyńskiego 14 Kraków 30-348, Poland

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REAL

EXPLORE THE REAL DRUG **PHARMACOKINETICS** FOR SCIENCE, PHARMACOLOGY AND MEDICINE

11.0





@seedsprint @scientist

Work smart, not just hard!





REVOLUTIONARY PRODUCT FOR TESTING DRUGS IN VITRO

Hit confirmation testing should be done in systems that mimic the real situation as much as possible.

LifeCube allows you to expose 3D grown tumors to the exact conditions, that the patient will have to go throught by mimicking the pharmacokinetics of the researched drug. Cells are seeded in the cuvette filled with a hydrogel for 3D cell cultures, LifeGel, creating large 3D structures with sizes comparable to the physiological ones.

All you have to do is to seed your cells in a cell culture cuvette filled with LifeGel, plan your experiment on the computer application and add drugs to the system. LifeCube will do the rest for you. Throughout the several weeks experiment LifeCube will pump the cell culture media, monitor the growth or shrinking of the tumor, add the drugs (as the patient would get it) and collect all the data. Work smart, not just hard!

LifeCube works in a duo with LifeGel. LifeCube is ideal to mimic the pharmacokinetics of any drug and LifeGel can precisely recreate the physiological niche of the cancer cell. In duo they provide a first of its class platform for **hit confirmation** experiments which recreates the true rounds of chemotherapy that the patient has to go through. The same 3D research system also finds its way to tackle basic research questions. Although it has been primarily designed to mimic pharmacokinetics it can be customised to suit your applications needs.











Put your cells inside the 3D cell culture cuvette

Posibility of culturing **multiple cells** in the same cuvette, under sterile conditions with constantly flowing culture media, mimicking artifical blood system.



Cuvette is designed so that, data from the tumor (like **fluorescence**) can be automatically collected.

BETTER MIMIC THE REAL PHARMACOKINETICS



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3



SOFTWARE



Analyze data about drug pharmacokinetics



Design the experiment using LifeCube software and start your experiment

> Thanks to regulated **pumping system**, you can mimic the desired pharmacokinetics, providing constant flow speed regulated through software.



Experiments are designed, planned and executed n the software with minimal necessary attendence during the experiment.





..... 3x Drug Dose -**1** 38 T MINT ON DEVICE . . . • 3x Drup Dose (DAY Flush (DAY 3) Flush . . .





Helps to design experiments, up to 8 weeks. Dosage and flow can be matched and can collect your data. This experiment can run for entire set of the therapy e.x. 3 weeks and mimic multiple rounds of drug administration which patients usually get.