

**INNOVECTIS**Ein Unternehmen der
Johann Wolfgang Goethe-Universität
Frankfurt am Main

Cover lid collector for the centrifugation-based collection of biological samples, e.g. organoids and spheroids

Project Status

Prototype is successfully implemented into the daily laboratory work.

Customer Benefits

- High through-put collection
- Fast collection of samples
- Low costs for users
- Easy handling
- No need for further equipment

Patents

- European priority patent application has been filed EP 17 171 571

The technologies can be licensed or assigned. Moreover, collaborations regarding further development are welcome.

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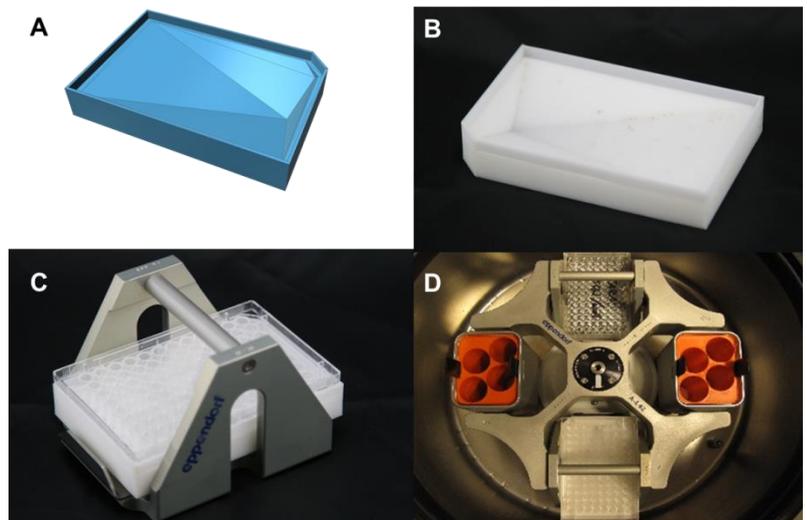
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Abstract

Scientists from Goethe University Frankfurt am Main developed an apparatus and a method for the centrifugation-based collection and accumulation of cell cultures, grown in multi-well plates, e.g. spheroids and organoids. The cover lid collector aims to collect high amounts of biological samples by a single centrifugation step.



Prototype “Cover lid collector”. (A) Schematic drawing of the cover lid collector, (B) Photograph of the prototype showing the cavity, in which the samples are collected. (C) Prototype engaged to a 96-well plate and placed into a rotor insert. (D) Cover lid collector prototype placed in a centrifuge.

Invention

Three-dimensional (3D) cell cultures, such as organoids or spheroids have become increasingly popular for life science research and pharmaceutical industry, e.g. in the fields of drug discovery and tissue engineering. For many experimental set-ups, high amounts of identical samples are required, which are typically grown in multi-well plates. In the end of the experiment, the samples need to be collected, which is a highly time consuming process that might affect the results of the experiment. The cover lid collector allows the collection and accumulation of cell cultures grown in multi-well plates by a single centrifugation step. The cover lid collector is an apparatus consisting of non-adhesive material. For the collection of the samples, the cover lid is placed on the multi-well plate, turned upside down and placed in the centrifuge. The collector comprises a cavity, which collects the culture medium and the biological samples during centrifugation. In the end of the centrifugation step, all samples are collected at the tip of the cavity, which can be easily transferred and used for further experiments. The cover lid collector can be produced as a disposable or re-usable product.