Novel culturing platform for brain slices and neuronal cells - DTU Orbit (08/11/2017)

Novel culturing platform for brain slices and neuronal cells

In this paper we demonstrate a novel culturing system for brain slices and neuronal cells, which can control the concentration of nutrients and the waste removal from the culture by adjusting the fluid flow within the device. The entire system can be placed in an incubator. The system has been tested successfully with brain slices and PC12 cells. The culture substrate can be modified using metal electrodes and/or nanostructures for conducting electrical measurements while culturing and for better mimicking the in vivo conditions.

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