EFS pacing kit for FDSS/µCELL

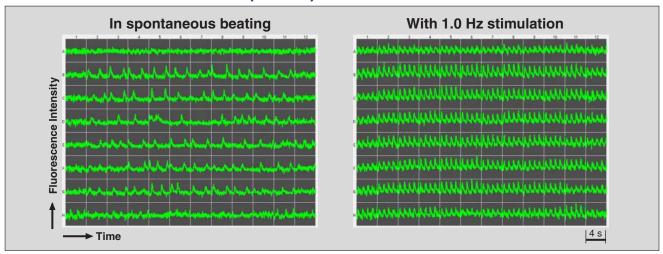
Specialized for Cardiomyocyte Assays

Overview

- Synchronizing cardiomyocyte beating in all 96 wells in a plate by electric field stimulation (EFS)
- Pacing cardiomyocytes with variable frequencies, with variable voltage and pulse duration of electric field stimulation

Electric Field Stimulation (EFS) pacing kit for FDSS/ μ CELL is an option to have an ability to stimulate cardiomyocytes electrically by the 96-electrode array to pace beatings of the cells, in which the cells are cultivated in a 96-well plate format. This option could be associated with other options available in FDSS/ μ CELL, such as assay plate heating unit and fast data acquisition software (up to 120 Hz frame reading), each of which could make more accurate monitoring of intracellular molecular events such as Ca²⁺ transients in cardiomyocytes. The EFS option with FDSS/ μ CELL should be useful in the drug discovery as in cardiomyocyte research.

Rat primary cardiomyocytes in 96-well plate, intracellular Ca²⁺ transient (Fluo-8)



Caution Notice:

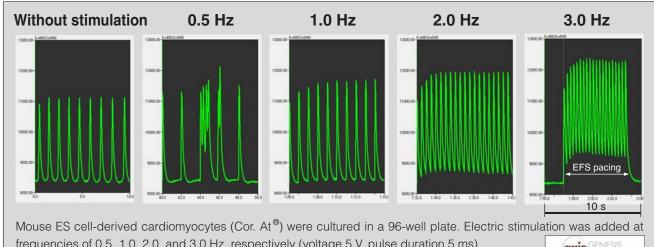
The FDSS/ μ CELL EFS system should not be used for optically detecting/monitoring change in transmembrane potential of the cells.

The FDSS/ μ CELL EFS system should not be used on any cell or cells in which the user or anyone else has expressed target ion channels.



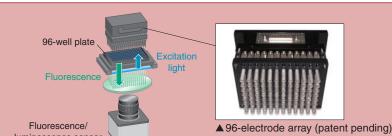
Measurement Example

Ca²⁺ transient measurement with EFS stimulation at various frequencies



frequencies of 0.5, 1.0, 2.0, and 3.0 Hz, respectively (voltage 5 V, pulse duration 5 ms).





- Fluorescence / Luminescence measurements while electric field stimulation.
- Variable EFS frequency.
- Variable EFS voltage.
- * EFS pacing kit option requires fluorescence / luminescence sensor and the latest data analysis computer.

Please contact your local sales representative for more detail.

Part number	Description
A11529-14	Heater Option
U8524-11	High Speed Acquisition Software
U8524-12	Analysis software for cardiomyocyte
M13040-01	96ch EFS Pacing Stimulation kit

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