

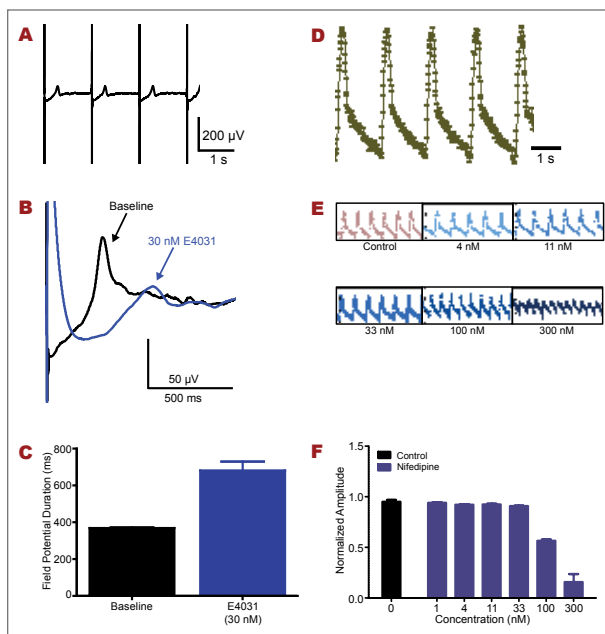


iCell® Cardiomyocytes²

Relevant biology, rapid workflows, and minimal handling are key components of successful life science models. iCell Cardiomyocytes², from FUJIFILM Cellular Dynamics, Inc. (FCDI), meet these requirements and more. Human cardiomyocytes differentiated from iPS cells, iCell Cardiomyocytes² offer the advantages of the industry standard, highly successful iCell Cardiomyocytes platform with the added benefit of being optimized for a more rapid recovery from thaw. Take advantage of stable transcriptional and phenotypic profiles with native biochemical, electrophysiological, and contractile responses while increasing productivity by moving from cryopreservation to robust and predictive results in 4 days.

Electrophysiology Protocols

iCell Cardiomyocytes² offer a rapid human-based cardiomyocyte preparation for proarrhythmia testing. Cellular Dynamics has developed protocols for interrogation via multi-electrode array (MEA) and impedance testing, enabling robust and accurate measurement of drug-induced effects on cardiac function. Visit www.fujifilmcdi.com/lit/ to access these protocols.



▲ Figure 1: iCell Cardiomyocytes² Provide a Relevant Proarrhythmia Substrate
Drug-induced mechanistic changes in electrical activity can be quantified: (A - C) multi-electrode array (MEA) recordings and response to E4031 and (D - E) impedance recordings and response to nifedipine. (Data were collected using Axion Biosystems' Maestro MEA technology and ACEA Biosciences' xCELLigence RTCA Cardio System.)

Advantages

- **Fast recovery:** iCell Cardiomyocytes² are optimized for rapid recovery from cryopreservation. Thaw and use within 4 days.
- **Minimal handling:** iCell Cardiomyocytes² require a limited number of hands-on steps. Reduce lab time and the potential for contamination with as little as two media changes before use.
- **Validated performance:** The iCell Cardiomyocytes platform has fueled more publications than have cardiomyocytes from all other commercial providers combined.
- **Easy to implement:** iCell Cardiomyocytes² are packaged with media and protocols and backed by a knowledgeable Technical Support team to ensure relevant training, timely assistance, and seamless implementation.

Applications

iCell Cardiomyocytes² can be used on multiple platforms to study a variety of disease models in all in vitro phases of drug discovery:

Disease Modeling

- Arrhythmia
- Hypertrophy
- Cardiomyopathy
- Hypoxia

Drug Discovery

- Disease modeling
- Phenotypic and target-based screening
- Target identification
- Hit-to-lead validation
- Lead optimization

Specifications

Cell Type	Cardiomyocytes
Organism	Human
Source	Differentiated from an FCDI reprogrammed human iPS cell line
Purity	>95% cardiomyocytes
Quantity	≥5.0 x 10 ⁶ viable cells per vial
Shipped	Frozen

Ordering Information

Kit	Component(s)*	Catalog Number
iCell Cardiomyocytes ² Kit, 01434	≥5.0 x 10 ⁶ viable cells 30 ml Plating Medium 2 x 100 ml Maintenance Medium	R1017
iCell Cardiomyocytes Maintenance Medium	100 ml Maintenance Medium	M1003

* A User's Guide is provided in each kit.

For More Information

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iCell Products

Provide access to biologically relevant, human iPS cells for disease modeling, drug discovery, toxicity testing, and regenerative medicine. FCDI's rapidly growing portfolio of iCell products includes human cardiomyocytes, GABAergic, glutamatergic, dopaminergic and motor neurons, hepatocytes, endothelial cells, astrocytes, hematopoietic progenitor cells, skeletal myoblasts, macrophages, and others.

Visit the FCDI website for the most current list of supported cell types.

