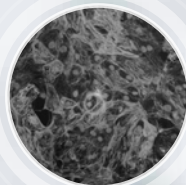


# Cellartis® Pure hES-CM

Human cardiomyocytes derived from embryonic stem cells  
as an effective tool for *in vitro* evaluation of cardiotoxicity



[www.cellartis.com](http://www.cellartis.com)

**Cellartis® Pure hES-CM** is a pure population of hES-derived cardiomyocytes (>90%), representing a consistent and convenient source of large numbers of physiologically relevant cardiomyocytes that are excellent *in vitro* tools for studies of human cardiomyocyte functions and for cardiac safety pharmacology assays. Cellartis® Pure hES-CM are available in frozen vial format with optimized protocols for cardiomyocytes culture in beating monolayers. Cellartis® Pure hES-CM are available from the hESC line SA121, registered at the European hESC registry.

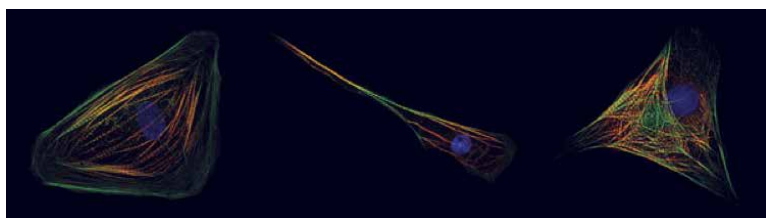


Figure 1: ICC displaying cardiac Troponin I in Cellartis® Pure hES-CM (red) and F-actin (green)

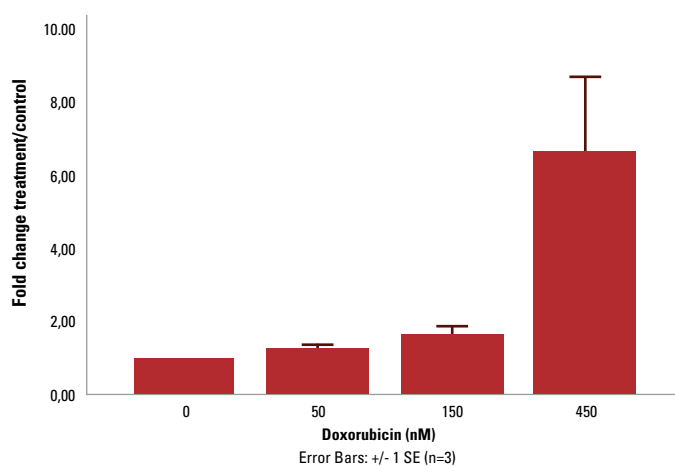


Figure 2: Troponin release from Cellartis® Pure hES-CM in response to doxorubicin

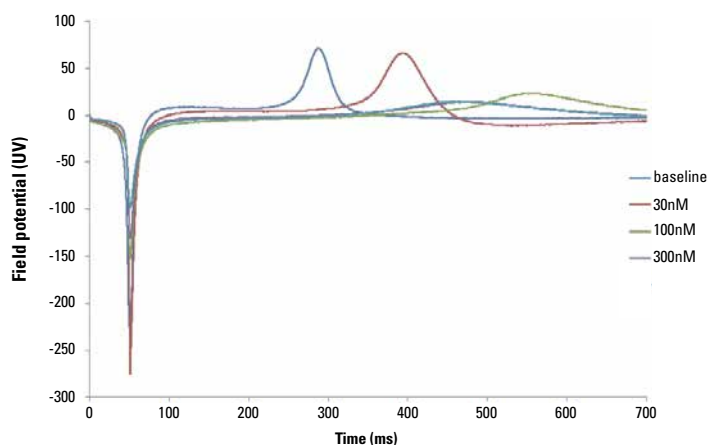


Figure 3: Dose-dependent prolongation of field potential duration after stimulation with Cellartis® Pure hES-CM E-4031 in (MED64 MEA System)

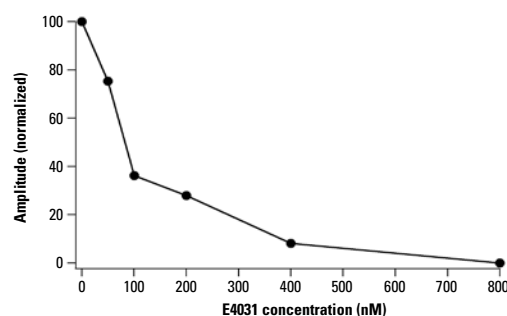


Figure 4: Dose-dependent effect of E-4031 on amplitude as measured by impedance Cellartis® Pure hES-CM (CardioExcyte 96, Nanion).

#### ADVANTAGES

- Expression of major cardiac markers and ion channels
- High purity
- Expected response to cardiac stimuli
- Functional similarities to adult human cardiomyocytes
- Low LOT-to-LOT variation

#### APPLICATIONS

- Safety pharmacology
- Cardiotoxicity testing
- Discovery of novel cardiac drug targets
- High Content Analysis

#### TYPICAL ASSAYS

- Micro Electrode Array (MEA)
- Voltage-clamp studies
- Transmembrane Action Potential (TAP)
- hERG channel inhibition
- Ion channel trafficking

PRODUCT	CATALOGUE #	SOURCE	FORMAT
Cellartis® Pure hES-CM	CM-203-VIAL-KIT	hES cell line SA121-cTnT-Hygro	>3M viable cells, suitable for multiwell plate format

### ORDERING INFORMATION