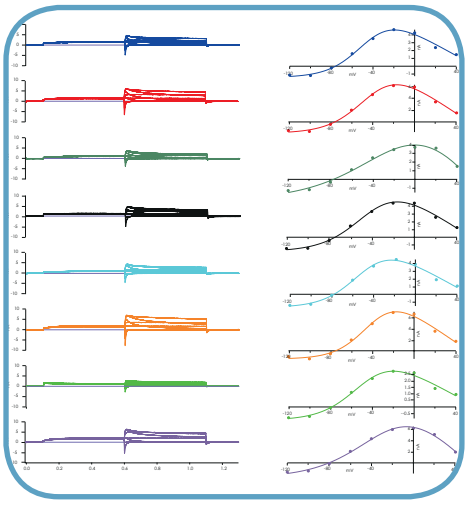
Patchliner Safety Edition.
Straightforward cardiac safety.

Patchliner Safety Edition

HESI

CiPA

Comprehensive safety testing



Patchliner Safety Edition features:

- Ready to use safety pharmacology protocols and analysis routines
- Pre-loaded routines and SOPs for hERG, $Na_V1.5$-peak, $Na_V1.5$-late and $Ca_V1.2$
- Installation and training focussed on safety pharmacology experiments
- Temperature control for measurements at physiological temperature
- Patchliner CoolingPlate for viability of cells and stability of compounds
- Dynamic clamp for action potential recordings of hiPSC-derived cardiomyocytes
- Exceptional support from Nanion CiPA experts

Patchliner
Safety Edition

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Nanion Europe
info@nanion.de
phone: +49 89 2 190 95-0
www.nanion.de

Nanion USA
info@nanionntech.com
phone: 1-888-9-NANION

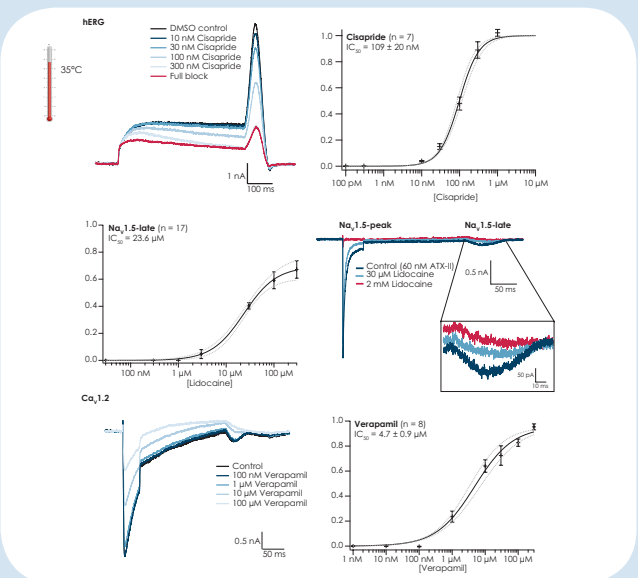
Nanion China
andy.di@nanion.cn
phone: +86 10 82 17 63 86

Nanion Japan
ohtsuki@nanion.jp
phone: +81 3 6457 8776

nan]i[on

Fast and reliable cardiac safety screening

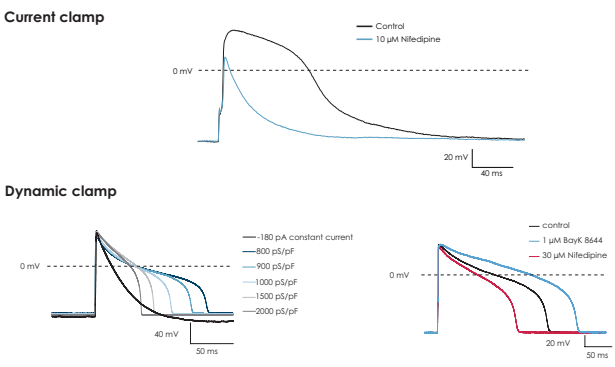
"Late compound withdrawal due to cardiac safety liability issues is costly and inefficient. Platforms are required supporting reliable compound testing in early development. The Patchliner has drastically improved the efficiency of our safety testing by applying a high degree of automation to otherwise manually performed low throughput patch clamp experiments with maintained data quality. The compatibility with stem cells is extraordinary, a vital feature regarding the upcoming need for the Comprehensive in vitro Proarrhythmia Assay (CiPA) recently discussed at the FDA/CSRC/ HESI Think Tank Meeting. The new paradigm aims at mechanistic understandings of ventricular arrhythmias by assessing multiple human cardiac currents and action potentials in stem cell-derived cardiomyocytes in combination with in silico modeling of ventricular myocyte physiology. The combination of cardiac network measurements followed by high quality patch clamp increase the possibility substantially, to quickly and correctly assess a compound's cardiotoxicity profile"
Dr. Liudmila Polonchuk, Principal Scientist, Non-Clinical Safety, F. Hoffmann La Roche



CiPA recommendations addressed

- $Na_V1.5$-peak and $Na_V1.5$-late
- Stable and reproducible $Ca_V1.2$
- CiPA recommended protocols for hERG including dynamic hERG (Milnes protocol)
- Standard operating procedures for all CiPA recommended ion channels provided
- Recordings at room and physiological temperature
- Up to 8 simultaneous recordings
- Powerful and efficient data analysis
- Up to 500 data points per day
- Cost-efficient consumables

Pharmacology on action potentials



Current and dynamic clamp

- hiPSC-derived cardiomyocytes
- Pharmacology on action potentials in current clamp mode
- The only automated patch clamp platform on the market which includes dynamic clamp
- Several different hiPSC-CMs validated
- Current clamp recordings at room and physiological temperature
- Complementary impedance/EFP device also available

Patchliner Safety Edition. All you need for cardiac safety screening.