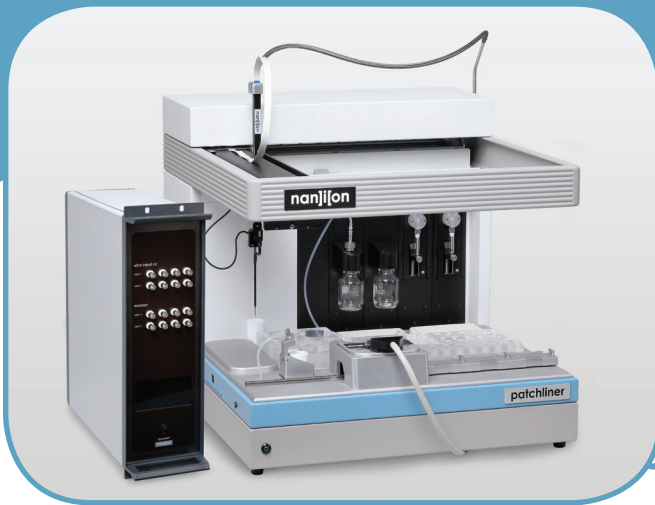
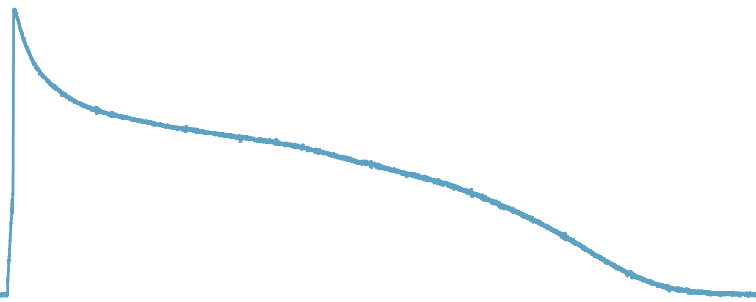


Patchliner Dynamite⁸.

Automated dynamic clamp.



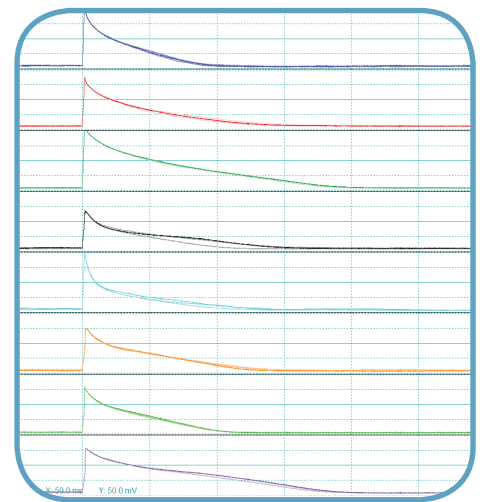
Patchliner Dynamite⁸



Fully automated dynamic clamp for the Patchliner

Dynamite⁸ features:

- Integrates seamlessly into the Patchliner
- Fully automated dynamic clamp on up to 8 cells simultaneously
- Seal compensation and IK_1 simulation individually calculated for each cell
- Improves stability and shape of APs from hiPSC-CMs for safety pharmacology experiments
- Full IC_{50} curve from each cell
- No user intervention required: parameters are calculated and applied by the Dynamite⁸
- Stable and reliable system



Patchliner Dynamite⁸

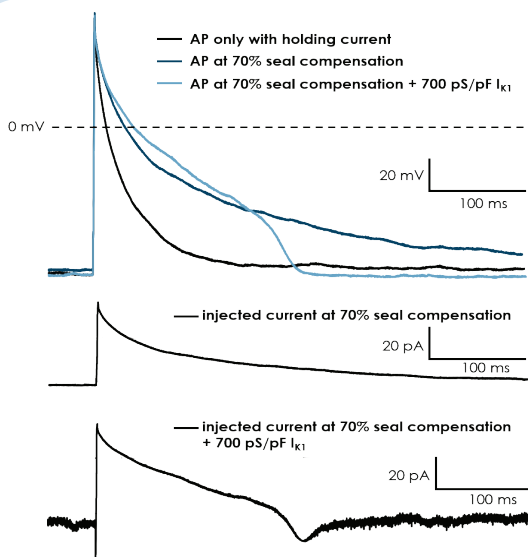
nanjion

Fast and reliable cardiac safety screening

"Developing and working with the Dynamite⁸ is an exciting and unique experience. Combination of *in silico* and *in vitro* techniques gave us an exceptional tool. We have the possibility to record stable action potentials from hiPSC-CMs in a fully automated way without major user input. With the help of seal compensation and injection of simulated I_{K1} through the Dynamite⁸ we could overcome the technical difficulties of patch clamping smaller cells with higher

membrane resistance and lower K^+ -conductance. This can make it as a useful tool in cardiac safety pharmacology, because it provides the opportunity to test compounds directly on human cardiomyocytes with significantly improved success rates."

Dr. András Horváth, Application Scientist
Nanon Technologies

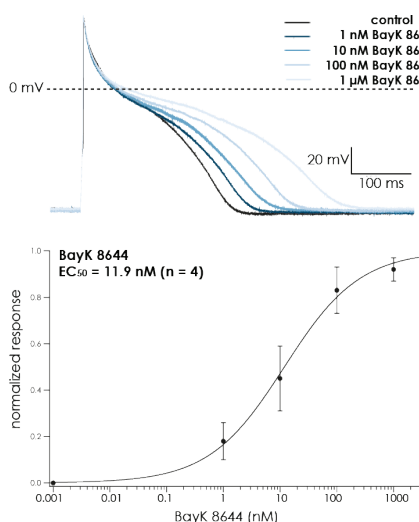


From: Goversen et al, 2018, Frontiers in Physiology

Simulating I_{K1} : Stable action potentials

- I_{K1} modelled individually in each cell
- Automatic seal compensation
- Stable resting membrane potential
- Stable action potential duration
- Up to 8 simultaneous recordings
- Cost-efficient consumables

Pharmacology on action potentials



Dynamic clamp: Pharmacology

- hiPSC-derived cardiomyocytes
- Pharmacology on action potentials in dynamic clamp mode
- The only dynamic clamp system on the market integrated in a fully automated patch clamp system
- Validated for a range of hiPSC-CMs
- Powerful and efficient data analysis
- Dynamic clamp recordings at ambient and physiological temperature

Patchliner Dynamite⁸. For stable and reproducible APs from hiPSCs.