

Electrophysiology Services

Your Channel, Our Solution

Ion channels are the second largest class of membrane protein targets after GPCRs and roughly 20% of small molecule drugs listed in the ChEMBL database target ion channels.

Our scientists will support your ion channel drug discovery program, taking advantage of our experience in more than 70 ion channel programs conducted in all fields of life sciences.

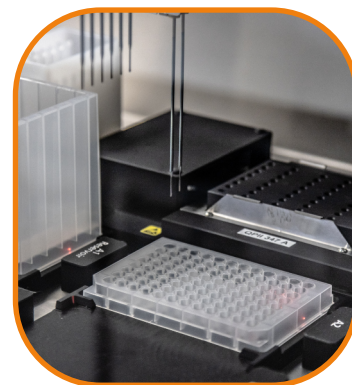
Customized Cell Line Engineering

Generation of constructs optimized for ion channel expression

Functional clone selection

Biophysical and pharmacological validation

State-of-the-art ion channel characterization by electrophysiological methods (manual and automated patch clamp)



High-Throughput Screening

Assay adaptation

Access to 325,000 compounds of **AXX^{DIV4.0}** library

Large screening campaigns

Strong correlation between electrophysiology and surrogate techniques

SyncroPatch 384i (Nanion)

Medium-Throughput Screening

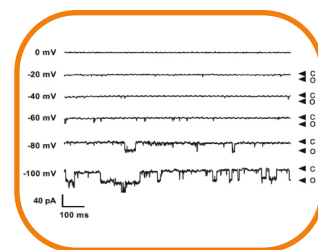
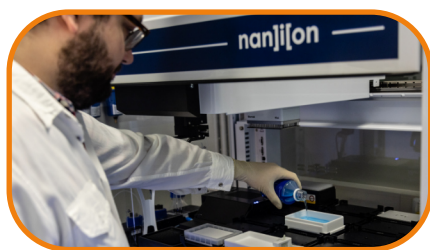
Hit confirmation, SAR campaign, hit-to-lead studies

Selectivity and specificity assays

Compound profiling

Cardiac safety ion channels panel

QPatch II 48X, QPatch 16X (Sophion)



Mode of Action Studies

Manual patch-clamp

Molecular biology facilities (single point mutations, knock-in, knock-out and more)

Innovation

Optogenetics

Organellar electrophysiology (mitochondria, lysosomes, nuclei and more)

Electrophysiology using iPS-derived cells

