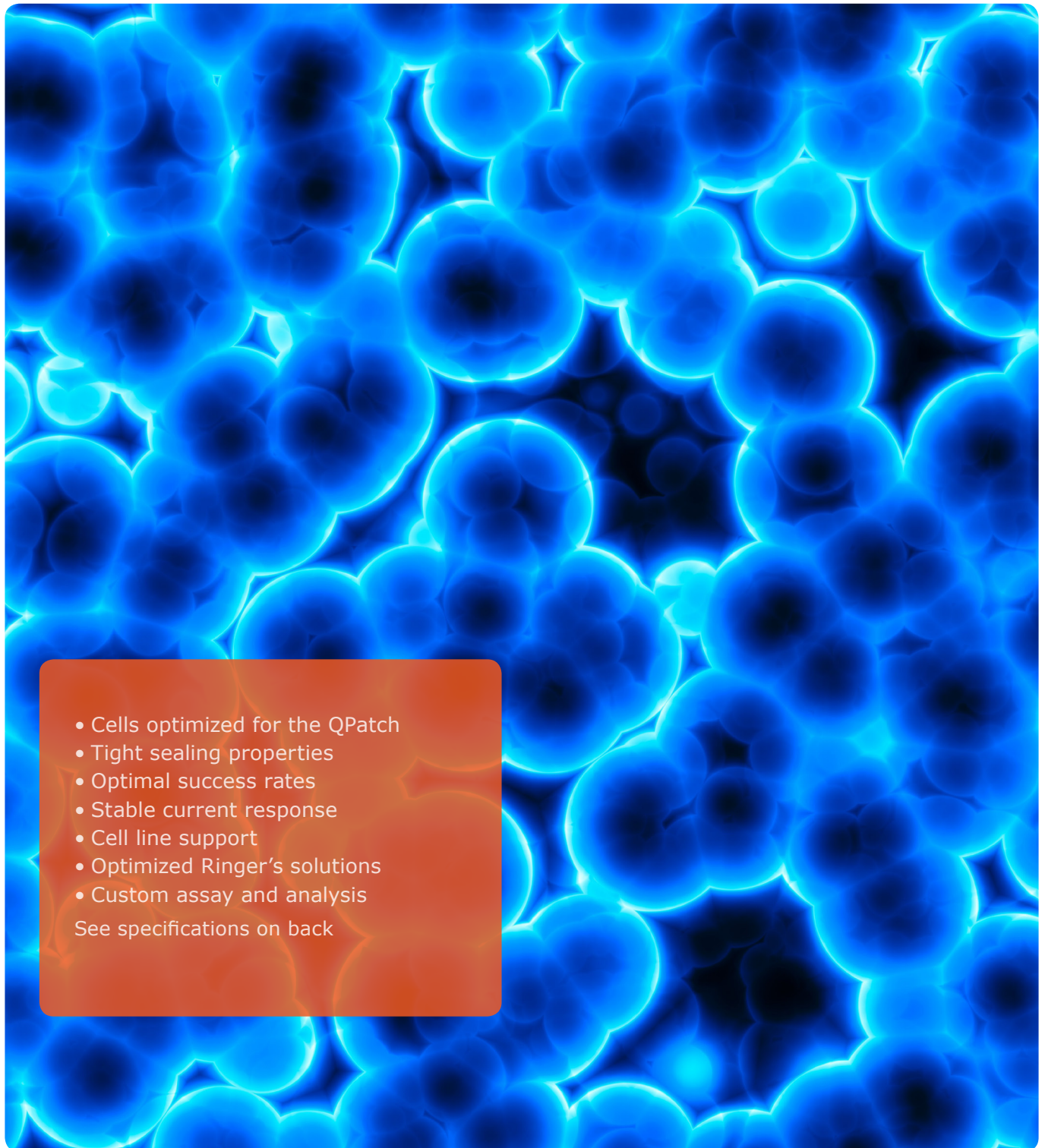


Product Specification:



# QCells

CHO-hERG DUO optimized for the QPatch



- Cells optimized for the QPatch
  - Tight sealing properties
  - Optimal success rates
  - Stable current response
  - Cell line support
  - Optimized Ringer's solutions
  - Custom assay and analysis
- See specifications on back

The potassium channel hERG (human Ether-á-go-go) encodes for a protein best known for its contribution to the electrical activity of the heart. hERG mediates the repolarizing  $I_{kr}$  current in the action potential.

Sophion's unique experience with automated patch clamping and cell culture optimizations means that we can offer QPatch optimized cells, QCells, for your experiments, which guarantees a uniform cell line with a near perfect and stable expression profile. Sophion collaborates with a number of cell line vendors to provide your cell line of choice.

This QCell, CHO-hERG DUO, is now available for purchase directly from Sophion, and was developed and optimized in collaboration with B'SYS.

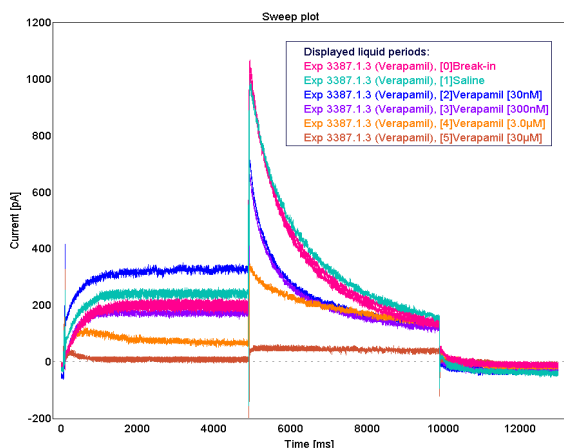


Fig. 1 Raw data trace of hERG current at increasing concentrations of verapamil.

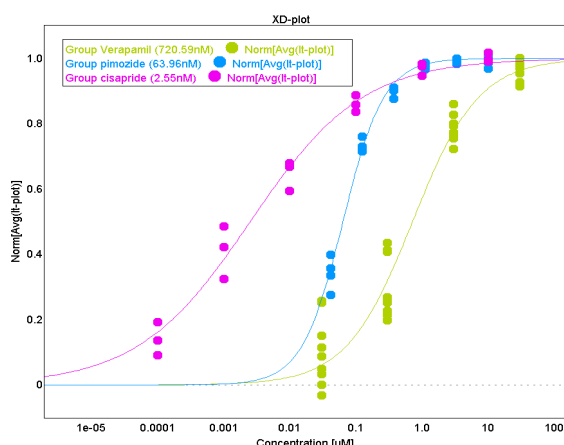


Fig. 2 Hill fits for three hERG blockers, verapamil, pimoizide and cisapride.

## QCell properties

Passage stability	Min. 30 passages
Mean current amplitude single-hole	500 pA
Mean current amplitude multi-hole	3500 pA

## QPlate success rates

	Single-hole	Multi-hole
Cell attachment (%)	100	100
Seal > 100 MΩ (%)	94	n/a
Seal > 1 GΩ	75	n/a
Whole-cells (%)	75	100
Completed experiments (%)	70	100
Representative whole-cell lifetime (min)	25	25