

Product Specification:



QCells

HEK-ASIC3 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 acid sensing ion channel 3 (ASIC3) is found in the sensory peripheral nervous system and is correlated with pain. ASIC3 is gated by a change in pH and forms a sodium-selective pore.

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, HEK-ASIC3, is now available for purchase directly from Sophion, and was developed and optimized for QPatch experiments.

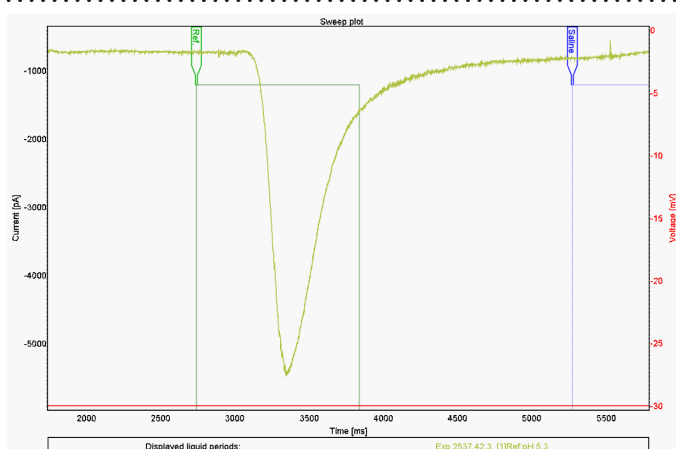


Fig. 1 Raw data trace of ASIC3 current evoked at pH 5.3 in multi-hole mode

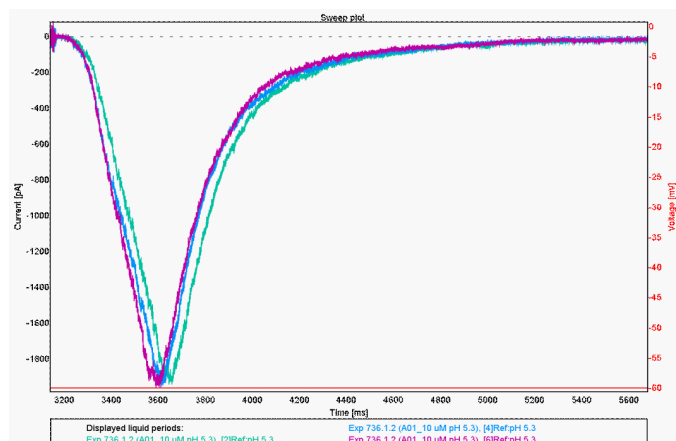


Fig. 2 Three consecutive stimulations with pH 5.3 in single-hole mode

QCell properties

Mean current amplitude single-hole (Vh -60 mV)	1.2±0.1 nA
Mean current amplitude multi-hole (Vh -30 mV)	3,5±0.4 nA
H ⁺ IC ₅₀ (pH)	6.8

QPlate success rates

	Single-hole	Multi-hole
Cell attachment (%)	97	100
Seal > 100 MΩ (%)	93	10
Seal > 1 GΩ (%)	41	n/a
Whole-cells (%)	88	100
Completed experiments (%)	81	100
Representative whole-cell lifetime (min)	20	20