

Product Specification:



QCells

HEK-GluR6 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 glutamate receptor GluR6 belongs to the family of kainate receptors and is encoded by the GRIK2 gene. GluR6 is implicated in synaptic plasticity and learning and memory.

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-GluR6, is now available for purchase directly from Sophion, and was developed and optimized in collaboration with Millipore.

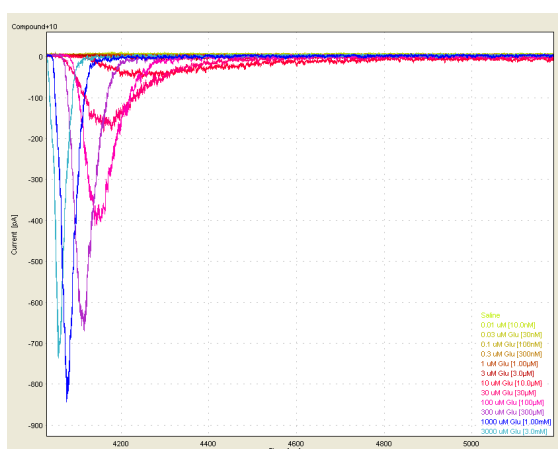


Fig. 1 Raw data for glutamate 12-point dose-response.

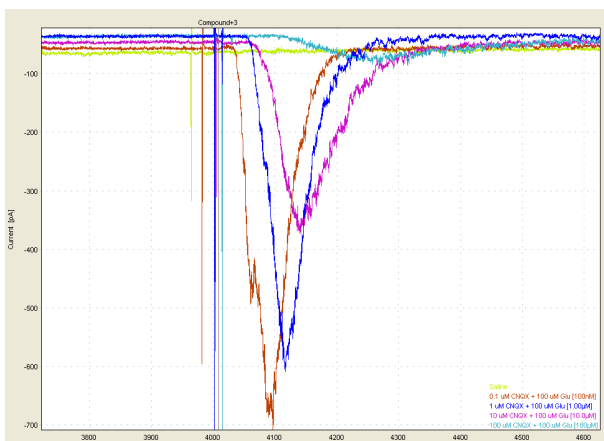


Fig. 2 Raw data for antagonist CNQX block of GluR6 current.

QCell properties

Mean current (amplitude 100 mM glutamate)	-424.4±43 pA
EC ₅₀ glutamate	20 mM
EC ₅₀ kainate	5.5 μM
IC ₅₀ CNQX	5.0 μM

QPlate success rates

	Single-hole
Number of QPlates	5
Cell attachment (%)	91
Seal > 100 MΩ (%)	81
Whole-cells (%)	73
Completed experiments (%)	57
Representative whole-cell lifetime (min)	15