NEUROMICS

Primary Neuronal Tissue-More Information and Data

Neural tissue is micro-dissected from distinct brain regions. This tissue is shipped live, not frozen, in a nutrient rich medium that keeps the cells viable for weeks. Following a straight forward and rapid protocol to dissociate the cells (either mechanical or enzymatic), your primary culture can be up and running in less than 1 hour of receiving the tissue. Along with the tissue, Neuromics provides Media for enzymatic dissociation and a defined, highly optimized, complete media for the first 4-5 days of cell growth.

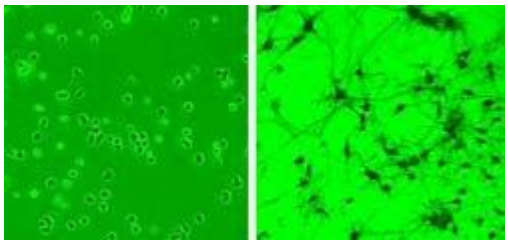

Figure 1:Images show primary culture from micro-dissected hippocampus. A) Neurons are round and healthy 1 hr after plating on poly-D-lysine substrate. B) Shown 5 days in culture, Neurons remain healthy and have extended processes.

The cells appear initially round and without processes. Within several days, the cells start to extend neurites, and depending on the duration of your culture, develop extensive processes (Figure 1). The media provided with the tissue selects for neurons and produces a robust (Figure 2) neuronal culture of high purity (Figure 3).

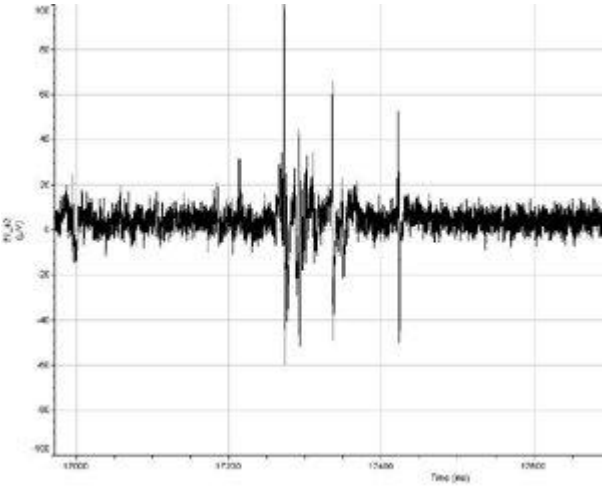

Figure 2: Spontaneous electrical activity recorded on a micro-array. Data from hippocamapal neurons after 22 days in culture.

Our Primary Neuronal Tissue and supporting reagents decrease the time and expertise required as well as improve reliability when using primary cells in neuroscience applications. The primary cells we provide eliminate the need to use internal resources to isolate cells and the headaches of maintaining animal protocols. The cells can be used in any type of experiment that would benefit form using primary cells, such as:

- Neuroscience drug discovery and development
- Neuro-development studies
- Gene/protein expression analysis
- Electrophysiology

Feedback from customers and collaborators to date indicate that the micro-dissected hippocampal and cortical tissues produce the most robust cultures while the mid-brain has been more challenging to work with to obtain high number of viable cells. We are currently working on ways to improve the cultures obtained from mid-brain knowing the importance of this tissue in neurodegenerative research.

Should you have questions, do not hesitate to contact me directly.

Pete Shuster (pshuster@neuromics.com or 612-801-1007.

Thank you.

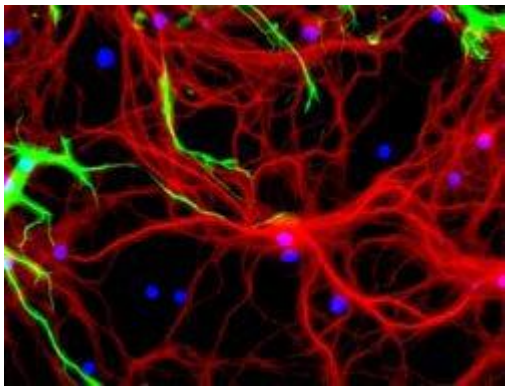

Figure 3:Triple labeled image for Neurofilament H(red), GFAP(green) and DAPI(blue). In hippocampal and cortical cultured cells, greater than 95% of the cells are neurons when evaluated using immunocytochemistry.