Frequently Asked Questions

How many times can I passage hNPCs?

For consistent results in your differentiation studies and other experiments, we recommend using Axol hNPCs below three passages after thawing. You can get two plates of 70-80% confluent neurons from one unit of our hNPCs (2M cells per vial). We recommend that you thaw the cells into 3 wells of a 6-well plate (or equivalent surface area).

How long can I keep culturing the cerebral cortical neurons?

We recommend that you use the cerebral cortical neurons within two months after receiving them.

Where can I find protocols for plating and using these cells?

Full instruction manuals for use with our hNPCs or hCCNs can be found on product specific pages under the tab titled “Protocols and FAQs”

What type of medium is recommended for use with the Neural Progenitor (hNPCs) and Cerebral Cortical Neurons (hCCNs)?

It is recommended to use the Neural Maintenance Medium for use with these cells (Catalog # NBP2-31344). It is supplied as 4 x 125mL (500 mL total). ***We guarantee the performance of the cells only if the recommended media are used exclusively, and the recommended protocols are followed.***

Do the hNPCs and hCCNs share the same type of medium?

Yes, Neural Maintenance Medium can be used with either.

What density should the neural progenitor cells (hNPCs) or frozen young neurons (hyCCNs) be plated at?

50,000 cells per cm2 is the standard plating density suggested.

How long does it take for the hNPCs to expand to 80% confluent (to be ready to be plated into a 6 well plate)?

After thawing into 3 wells of a 6-well plate at 500,000 cells per well (or 50,000 cells per cm2) the cells should reach 80% confluence in approximately 3-5 days.

How long does it take for the hNPCs to become fully electrically active?

Typically 30 – 45 days

Can I plate cells on glass cover slips for ICC staining?

Yes, we find the cells grow better on plastics (Nunc® labtek® Chamber Slides) but you can also use glass coverslips, with either glass or plastics you will need to treat the surface (poly-L-ornithine/laminin, with or without Borate Buffer)

Can we grow up hNPCs and then freeze them back down again in aliquots to then use for further differentiation into hCCNs? What freezing medium do you recommend?

We cannot guarantee the cell viability for freezing and thawing procedures performed outside of our lab. We recommend that users avoid re-freezing cells.

Is Sure Boost™ required for maintenance as well as plating?

No, it is only required for initial plating of cells from frozen cell stocks.

Do I need to add antibiotics to the cell culture media?

No, antibiotics can sometimes affect the differentiation process. However, we include pen-strep in our fully defined medium (maximum usable amount). You should not add more antibiotics to the cells.

Is there batch to batch variability?

No, there is minimal difference between batches from a single donor line; however, between donors there can be minor differences in the confluence and growth speed.

Do you charge VAT?

Our prices are exclusive of VAT and VAT only applies to customers in the European Union (EU). If your institution is VAT exempt (usually for academic/charity organizations). Please ensure you fax your VAT exemption certificate to us indicating your order number to: **303-730-1966**. Please check with your purchasing department for more information.