

Cryopreserved rat brain cortex neuronal cells

R-Cx

Introduction

Ready to use neurons from rat brain (E18, 19) are cell suspensions of high quality primary embryonic brain neuronal cells (including glia) prepared by standardized methods and are ready for immediate culture. Each vial of cortical cells contains approximately 4 million viable cells. This will seed into 10 or more wells of a 24-well plate and 50 or more wells of a 96-well plate using the recommended plating densities and medium. Cell death will occur during the first few days after plating and debris will be observed. This is normal. After approximately 4 days in culture, the cells will form a neurite network and by the 7th day, debris will be minimal.

Recommended cell culture substrates

Primary neuronal cells need an appropriate substrate to adhere and survive. The preferred substrate is poly-D-lysine with laminin. Poly-D-lysine or poly-L-lysine can also be used alone to coat the cell culture plasticware or cover slips. Coated cell culture plates, dishes, or cover slips can either be purchased from a supplier or prepared immediately prior to use. Protocols for the recommended substrates are available on our web site at www.lonza.com.

Characterization of cells

Each lot of neuronal cells is tested using mycoplasma PCR, bio-burden assay, ELISA and immunohistochemistry.

Recommended medium

The recommended medium for the rat brain cortex neuronal cells is the PNGM™ BulletKit™. The BulletKit™ contains a 200 ml bottle of primary neuron basal medium (PNBM) and PNGM™ SingleQuots™.

Performance

Recommended seeding density for subculture

Volume of plating medium	Plating format
9 ml	1 ml cells suspension
200 µl/well	96-well plate
1 ml/well	24-well plate

Quality control

The cells test negative for mycoplasma and bacteria. Additional molecular and immunochemical testing for quality is done following conditions that mimic shipping.

Ordering information

R-Cx-500	Rat brain cortex (Cx)	≥1 ml cell suspension
CC-4461	PNGM™ BulletKit™	Kit which contains a 200 ml bottle of PNBM and PNGM™ SingleQuots™
CC-3256	PNBM basal medium	Primary neuron basal medium (200 ml)
CC-4462	PNGM™ SingleQuots™	NSF-1, 4 ml; L-glutamine, 2 ml; GA, 0.2 ml

Product warranty

CULTURES HAVE A FINITE LIFESPAN *IN VITRO*. Lonza guarantees cell performance only when the approved media and supplements are used.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use *in vitro* diagnostic or clinical procedures. **WARNING:** Handle as a potentially biohazardous material under biosafety level 1 containment. These cells are not known to contain an agent known to cause disease in healthy adult humans. These cells have not been screened for hepatitis B, human immunodeficiency viruses or other adventitious agents. If you require further information, please contact your site safety officer or scientific support.