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# Rat cerebellar neurons

**Technical data sheet**

## Introduction

Ready to use rat cerebellar neurons are suspensions of high quality neurons prepared by standardized methods from postnatal day 8 rats and are ready for immediate culture. Each vial of cerebellar neurons contains approximately 4 million cells in a 1 ml suspension. 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. By the 7$^{th}$ day, debris will be minimal. Mitotic inhibitors must be added for inhibition of non-neuronal cell proliferation.

## 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 can also be used alone to coat the cell culture plastic ware 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

The rat cerebellar neurons stain positive for Map2, GFAP and Tuj.

## Recommended medium

The recommended medium for the rat cerebellar neurons is the PNGM™-A BulletKit™. The BulletKit™ contains a 200 ml bottle of primary neuron basal medium (PNBM), PNGM™ SingleQuots™, and PNGM™-A SingleQuots™. The addition of mitotic inhibitors is also recommended.

## Performance

Recommended seeding density for subculture

| Volume of plating medium | Plating format |
|---|---|
| 7 ml for initial thawing | 1 ml frozen 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-CB-503 | Rat cerebellum neurons | ≥1.0 ml cell suspension |
| CC-4512 | PNGM™-A BulletKit™ | Kit which contains a 200 ml bottle of PNBM, PNGM™ SingleQuots™, PNGM™-A 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 |
| CC-4511 | PNGM™-A SingleQuots™ | OA, 0.5ml; PA, 1.5 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.