

## Introducing Gibco Poly-D-Lysine

Enable optimal neuronal cell adhesion





The new Gibco<sup>™</sup> Poly-D-Lysine (PDL) is a chemically synthesized extracellular matrix used to facilitate cell adhesion to tissue culture-treated plastic and glass surfaces. Unlike most natural extracellular matrixes (ECMs) that mediate cell attachment through cell surface receptors such as integrins, our synthetic, cationic PDL binds to the negatively charged cell membrane through electrostatic interaction.

Gibco Poly-D-Lysine contains polymers within a molecular weight range of 50,000–150,000 Daltons, making this product ideal for neuronal culture applications, and is provided as a liquid at a concentration of 0.1 mg/mL.

- Chemically synthesized and animal origin-free
- Sterile-filtered for cell culture applications
- Validated with Gibco<sup>™</sup> B-27<sup>™</sup> Supplement and Gibco<sup>™</sup>
  B-27<sup>™</sup> Plus Neuronal Culture System when used with Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> plastic and glass bottom dishes



## Supports neuronal cell adhesion and viability

Fastidious cells such as primary neurons and pluripotent stem cell (PSC)–derived neurons require a PDL coating to attach, spread, and grow *in vitro*.

When used on Nunc cell culture plastics with B-27 Supplement or the B-27 Plus Neuronal Culture System, Poly-D-Lysine maintains cell viability and normal growth characteristics in multiple neuronal cell types.



Figure 1. Primary rat cortical neurons cultured in B-27 Plus Neuronal Culture System (Cat. No. A3653401) on Gibco Poly-D-Lysine. Primary cortical neurons were seeded on Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Lab-Tek<sup>™</sup> II Chamber Slides (Cat. No. 154526PK) at a density of 45,000 cells/cm<sup>2</sup>. (A) Phase contrast image of neurons maintained in B-27 Plus system for 27 days. (B) Fluorescence image of neurons that were maintained for 28 days and then stained for MAP2 (red) and HuC/D (green). Nuclei were counterstained with DAPI (blue).



Figure 2. Primary rat cortical neurons seeded on Nunc Glass Bottom Dishes (Cat. No. 150680) at a density of 90,000 cells/cm<sup>2</sup> on Gibco Poly-D-Lysine. Neurons were maintained in the B-27 Plus system for 21 days and then fixed and stained for MAP2 (red) and synapsin (green). Nuclei were counterstained with DAPI (blue).



## **Ordering information**

Product	Size or Quantity	Cat. No.
Poly-D-Lysine	100 mL	A3890401
B-27 Plus Neuronal Culture System	1 system	A3653401

## Find out more at thermofisher.com/pdl

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