ScienCell™
Research Laboratories

Poly-L-Lysine (PLL)

Catalog number: 0403/0413

Product Description

Poly-L-Lysine (PLL), a synthetic compound, is a highly positively charged amino acid chain that enhances cell adhesion by altering surface charges on the culture substrate [1]. It is commonly used as a coating agent to promote cell adhesion in culture. In addition to promoting cell adhesion, PLL surface treatments improve the survival of many primary cells in culture and support neurite outgrowth. This solution is provided as stock solution and contains polymers in the 70,000 - 150,000 kDa range.

Concentration

10 mg/ml, sterile-filtered.

Storage Conditions

Product is stable for at least 6 months from the date of receipt when stored at 2 - 8° C. Keep sterile.

Applications

Substrate for cell culture adhesion. Optimal conditions for attachment must be determined for each cell line and application. Recommended concentration for normal human cell attachment is 2 µg/cm^2.

Specifications

1. Functional Assay: Tested for ability to promote attachment of normal human cells.
2. Sterility Testing: No bacterial or fungal growth detected after incubation at 37° C for 14 days following USP XXIV Chapter 71 sterility testing.
3. No mycoplasma contamination detected by PCR.
4. Endotoxin concentration ≤ 20 EU/ml by LAL assay.

Coating Procedure

The recommended coating concentration is 2 µg/cm^2 but may need optimization depending on cell type.

A. The following table is a guide for the suggested volumes required per flask:

	Water (ml)	Poly-L-lysine (µl)
T-25	5	5
T-75	10	15
T-150	15	30

B. Pipette the appropriate amount of water and PLL solution in each flask. Swirl the flask to ensure coverage. Incubate the flask for 1 hour at 37° C.

C. Remove PLL solution in the flask. Rinse the flask twice with sterile water. Add medium and cells (It is not necessary to dry the flask before adding medium and cells into flask).

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.

Reference:

[1]. McKeehan, W.L., Methods for Preparation of Media, Supplements, and Substrata for Serum-free Animal Cell Culture, A.R. Liss, NY p.209 (1984).