Poly-L-Lysine

Cat: P8141
Specification:25mg /100mg
Storage: Store at -20℃, and it is valid for 2 years.

Product Information
CAS： 25988-63-0
English name： Poly-L-Lysine
Appearance (Character)： White freeze-dried powder.
Molecular Weight： 150,000-300,000
Solubility: 10 mg/mL in water

Introduction

Polylysine solution is a widely used adhesive for tissue sections and glass slides. The interaction between this polycationic molecule and the anions on the tissue sections produces a strong adhesive force. The nature of the surface of the culture flask is crucial for cell culture. The negative glycoproteins on the surface of the cells tend to adsorb to hydrophilic surfaces, so if there is a significant amount of positive charge on the surface of the cell culture, it can promote cell adsorption. This is why optimizing the surface of cell culture using polylysine is important.

Application: Applicable to the anti-shedding treatment of slides used in histology, immunohistochemistry, frozen sections, cell smears, in situ hybridization, etc., to prevent tissue shedding during experimental procedures. It can also be used for cell culture to increase the ability of cells to adhere to the wall.

Instructions for use(*for reference only*):

Solution preparation:

Dissolve with deionized water and prepare the mother liquor for later use. and stored at -20℃.

Slide Preparation:

1. Dilute the polylysine solution with sterile water, typically to a working concentration of 0.01%.
2. Immerse the slides in the diluted polylysine solution for 5 minutes. Note that increasing the time will not improve the coating effect.
3. Dry the slides in an oven at 60°C for 1 hour, or leave them to dry overnight at room temperature (18-26°C) for use.

Precautions:

1. Each 100mL of diluted polylysine solution can coat 40-90 slides. Exceeding 90 slides will affect its adhesive force.
2. The slides must be kept clean before use. If necessary, clean them with a 70% ethanol solution containing 1% HCl.
3. The diluted polylysine solution should be stored at 2-8°C and remains stable for at least 3 months.

4. Used dilutions should be filtered, and discarded if cloudy or contaminated with bacteria.
5. A higher concentration of polylysine can be used, and the excess can be reused at least 20 times.

Culture Flask Treatment:

1. To coat culture plates or flasks, typically use a polylysine concentration of 0.01%.
2. Prepare 100ml of triple-distilled water and sterilize it with high pressure.
3. Apply 0.01% polylysine uniformly to the surface of the culture substrate at a rate of 50 microliters per square centimeter. Allow it to stand at room temperature for 5 minutes, then aspirate the excess liquid.
4. Rinse the surface with sterile water three times, ensuring sterile handling.
5. Allow the treated flasks to dry sterilely before use.
6. Sterile, recovered polylysine can be reused.

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.