Poly-L-Lysine Solution, 10 ×

Cat. No.: PB180523
Size: 10mL

General Information

Product Form	Liquid
Concentration	1 mg/mL
pH	6.8-7.2
Molecular weight	150,000-300,000
Dissolvent	10 mM PBS
Storage	-5~-20°C, Shading Light
Shipping	Ice bag
Expiration date	24 months

Background

Poly-L-Lysine (PLL) is a Poly-cation polymerized from lysine monomer.With a relative molecular weight of 70,000-300,000, PLL can be used as the growth matrix of cell culture, which can promote cell adhesion and adhesion to the wall. PLL is a commonly used cell adhesion agent in cell culture. Polyl-l-lysine (PLL) generally has molecular weight of 70,000-150,000, 150,000-300,000 and >300,000. The larger the molecular weight, the stronger the adhesion, but the more difficult it is to completely dissolve. Polyl-l-lysine with molecular weight of 150,000 - 300,000 is commonly used in cell culture.

Use Instructions

1. Dilution: Dilute the poly-L-lysine solution with sterile purified water or PBS at a ratio of 9:1 to a working concentration of 0.1 mg/mL. The diluted poly-L-lysine solution remains stable for at least 3 months when stored at 2–8°C.
2. The working concentration (0.1 mg/mL) of poly-L-Lysine is added to the culture vessel, the amount of which is added depending on the size of the vessel. Generally, it is enough to moisten or cover the growing side of the petri dish. For example, 1-2 mL poly-L-Lysine is added to the T25 culture flask.
3. The culture vessel is placed into a 37°C incubator and incubate for more than 30-60 min, paying attention to aseptic operation.
4. The poly-L-lysine solution is carefully aspirated, and the sterile culture bottle is securely capped and placed in either a 37°C incubator or 4°C refrigerator.
5. After more than 4 hours in the 37°C incubator or overnight in the 4°C refrigerator, the cell coating is completed.
6. The coated culture bottles can typically be stored at room temperature in a biosafety cabinet or at 4°C in a refrigerator for 3 to 7 days. It is advisable to use them within 3 days to ensure optimal coating efficacy. Prolonged storage may compromise the integrity of the coating.
7. In the biosafety cabinet, the coated culture flask is removed and washed 3 times with PBS or medium.
8. Culture flasks are used for normal inoculation.

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. The amount of coating solution depends on different culture vessels. Generally, it is ensured that the bottom of the culture vessel is completely covered, and the coating should not be dried within the time.

Culture vessels	Dosage recommendation (0.1 mg/mL,for reference only)
1 well in a 12-well plate	0.5 mL
1 well in a 6-wel plate	0.8 mL
6 cm culture dish	1-1.5 mL
10 cm culture dish	3 mL
T25 culture flask	1-1.5 mL
T75 culture flask	3-4 mL

3. Poly-L-lysine is mildly toxic. Therefore, the coated culture vessel must be cleaned 3 times with PBS or medium before use.
4. The coating process includes two stages: coating time and drying time. Coating time is the period during which the coating solution adheres to the surface; it is advisable to follow the recommended time since longer durations do not improve the effect.The drying time is the period allowed for the coated culture vessels to air dry after coating, ensuring that the coating solution is completely dry and achieves optimal adhesive properties.
5. 5. The effect of the coated liquid is not affected when it is transported at normal temperature for 3-5 days. However, it should be stored according to storage conditions.
6. All the above operations are based on sterile reagents, consumables, and operation in a sterile environment.