



PLKBS₄₀₀
Catalog#000-KBS400

PRINCIPLE

The loss of paraffin and frozen sections from slides has long been a problem during routine histological staining procedures. Various adhesives have been applied to slides to minimize this loss. Poly(L-lysine), a synthetic polyamino acid made from L-lysine units, is considered one of the most effective tissue adhesives. This polycationic biopolymer, in aqueous solution, can interact with the anionic sites of tissue sections to enhance cell attachment and adhesion to both plastic-ware and glass surfaces. Consequently, poly(L-lysine) can be used to culture a wide variety of cell types.

The molecular weight of poly(L-lysine) for cell culture can vary significantly, with lower molecular weight (30,000 Da) being less viscous and higher molecular weight (>300,000 Da) having more binding sites per molecule. This product uses a poly(L-lysine) of 84,000 Da, yielding a solution viscosity for easy handling while providing sufficient binding sites for cell attachment.

DESCRIPTION

PLKBS₄₀₀ is supplied as a clear colorless sterile-filtered solution containing 0.1% (w/v) poly(L-lysine HBr) and 0.01% (w/v) thimerosal, added as a preservative, in distilled water. It is *not intended* for human use.

INSTRUCTIONS FOR USE

The optimal concentration for cell attachment and culture may differ for various cell types. Some experimentation may be required to determine the optimal conditions for individual cell culture systems. A typical working concentration is 0.1 mg/ml.

1. Dilute PLKBS₄₀₀ solution 1:10 with deionized water prior to coating slides.
2. Use plastic containers and graduated cylinders when mixing or storing solution and coating slides.
3. Do not add fresh solution to used diluted solution.

STORAGE & STABILITY

Store PLKBS₄₀₀ solution at room temperature (18–26°C). Reagent is stable until expiration date, shown on label.

Store diluted PLKBS₄₀₀ solution in refrigerator (2–8°C). This diluted solution is stable for at least three months. Filter diluted solution after use.