3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Poly-DL-lysine hydrobromide

Product Number **P9011**
Storage Temperature –20 °C

Product Description
Molecular mass range: 25–40 kDa

Poly-DL-lysine is a charge enhancer that can be used to coat many surfaces. When used to coat ELISA plates, it tends to improve binding of IgG. High pH will aid binding to the plates.

Certain cells can digest poly-L-lysine, in which case only the poly-D-lysine should be used. This product is a mixture of both D- and L- forms. The lower molecular mass poly-DL-lysine products (1–4 kDa, 25–40 kDa) are easier to use because they are less viscous in solution, but the higher molecular mass poly-DL-lysine (>40 kDa) provides more attachment sites per molecule.

There may be a small amount of product in the β structure. This is because the HBr interferes with hydrogen bonding between the amino and carboxyl groups, or between the amino group and other N or O containing moieties. The secondary structures of polyamino acids have not been extensively studied, but it is known that the degree of secondary conformational regularity depends on the amino acid in the polymer.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
This product is soluble in water (50 mg/ml).

Procedure
In general, a 0.01% (w/v) solution of poly-DL-lysine is recommended for coating slides. After a 5 minute incubation, remove the excess solution and dry the slides at room temperature or in an oven at gentle heat. Coated slides are stable for one year if protected from dust. There is no need to sterilize slides coated with poly-DL-lysine by autoclaving; simply expose the slides to UV light overnight.

If uneven coating occurs, pretreat the glass slides with 1 mM magnesium acetate for 2–3 hours and then rinse the slides well before coating. Alternatively, they may be acid washed (hydrochloric acid or sulfuric acid). This treatment should allow for an even coating with the poly-DL-lysine solution.

This product can also be used to coat tissue culture plasticware. Prepare a solution of 0.1 mg/ml and aseptically transfer 0.5 ml to a non-tissue culture treated 25 cm^2 flask. Gently rock the flask to evenly coat the surface. After five minutes, remove the excess solution, rinse the surface is thoroughly with sterile water, and allow the flask to dry for several hours.

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