Gelatin Solution (0.1%)

Ref #G000001 **500mL**

港能生物科技
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Product Description

Gelatin Solution (0.1%) is a ready-to-use product designed to enhance cell adhesion and growth in cell culture applications. This solution is specifically formulated for the coating of culture dishes, providing a simple and effective method to improve the cultivation conditions for a wide range of cell types, including stem cells, fibroblasts, and epithelial cells.

Product Information

COMPONENT NAME	COMPONENT #	SIZE	STORAGE	SHELF LIFE
Gelatin Solution (0.1%)	G000001	500 mL	Store at 5 - 25°C.	Stable for 12 months from date of manufacture (MFG) on label.

Please refer to the Safety Data Sheet (SDS) for hazard information.

Preparation of M10 Culture Medium

The following example is for preparing 500 mL of complete medium. If preparing other volumes, adjust accordingly.

1. Gather all the components together and put them in Biosafety Cabinet after swiping with 70% ethanol.

2. Prepare a 500mL or 1L sterile glass bottle. Put all the components one by one into the bottle according to the order and amount. Tight the lid of the bottle. Gently shake the bottle to make all the components mix well.

3. Put it to the autoclave machine and run the liquid process

4. Prepare another sterile glass bottle. The Gelatin Solution will be filtered by the 500ml bottle top filter to make Gelatin Solution germ free.

5. Aliquot the germ-free Gelatin Solution into suitable containers. Seal all the containers with parafilm and temporarily store them in a 4-degree fridge before use.

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Directions for Use

1. **Preparation** - Ensure that the gelatin solution is well mixed and at room temperature before use. If stored in a refrigerator, allow the solution to warm up to room temperature to avoid cold shock to the cells.
2. **Coating the Culture Dishes** - For each culture dish, add enough gelatin solution to cover the surface. The amount may vary depending on the size of the dish:
   - For a 35 mm dish: use 1-2 mL of gelatin solution.
   - For a 60 mm dish: use 2-3 mL of gelatin solution.
   - For a 100 mm dish: use 5-10 mL of gelatin solution.
   - For T25 flasks: use 5 mL of gelatin solution.
   - For T75 flasks: use 10-15 mL of gelatin solution.
   - Gently swirl the dish to ensure the entire surface is covered with the gelatin solution.
3. **Incubation** - Allow the dishes to sit at room temperature or in an incubator at 37°C for at least 1 hour to ensure adequate coating. Some protocols recommend overnight incubation at 2-8°C, especially if a more robust coating is desired.
4. **Aspiration/Removal of Excess Gelatin** - After the incubation period, aspirate the gelatin solution gently without touching the surface of the dish. Be sure to remove all excess liquid to prevent detachment or overhydration of the cells.
5. **Drying** - Allow the dishes to dry in a sterile biosafety cabinet for about 30 minutes to ensure any remaining solution evaporates. This step can help to form a more uniform and stable gelatin layer.
6. **Seeding Cells** –
   - Seed the cells directly onto the gelatin-coated surface according to your experimental protocol.
   - Add appropriate growth media and place the culture dishes in an incubator set to the necessary conditions for your specific cell type.

- **Sterility**: Maintain sterility throughout the process to prevent contamination of your cultures.

- **Testing**: If you are using a new batch of gelatin solution, or if you are coating a different type of culture dish than you normally use, it might be beneficial to perform a test run to ensure the coating promotes proper cell adhesion and growth.

- **Documentation**: Keep detailed records of the coating process, including the batch number of the gelatin solution, the type and size of dishes used, and incubation times, to ensure reproducibility.

These directions are generalized for typical use and might need adjustments based on specific experimental setups or cell line requirements. Always refer to detailed protocols and guidelines specific to your cells and experiments.

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