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Product Information

Bovine Collagen Solutions

suitable for biomedical research

Catalog Numbers **804592**, **804614**, **and 804622** Storage Temperature 2–8 °C

CAS RN 9007-34-5

Product Description

These bovine collagen solutions gel at pH 7 and form 3D structures for culturing or coating plastic labware for increased cell adhesion.

Reagent Required but Not Provided.

Neutralization buffer (0.2 M sodium phosphate, pH 11) for formation of a three dimensional gel.

Precautions and Disclaimer

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

Storage/Stability

Store the collagen products at 2-8 °C.

Store the prepared Neutralization buffer at room temperature. If the buffer is refrigerated, a precipitate may form. If crystals are present, warm the buffer and mix before use.

Procedures

Three Dimensional Gel

- 1. Cool the collagen solution, pH 2, to 2–8 °C.
- Sterile filter the neutralization buffer (0.2 M sodium phosphate, pH 11) before use.
- Add 1 part of buffer to 9 parts of collagen solution and mix at 2–8 °C, i.e., 1 ml of neutralization buffer to 9 ml of collagen solution.
 Note: Before preparing a large scale buffer/collagen mixture, consider checking the pH on a small scale, i.e., add 0.2 ml of buffer to 1.8 ml of collagen
- Load the cold mixture into the plastic ware and then incubate the neutralized collagen at 37 °C for at least 45 minutes.

solution. The desired final pH is 7.0–7.6.

<u>Note</u>: Do not disturb the gel during the gelation process as this will result in a weaker gel.

Thin Coating of 35 mm Dish

- Dilute collagen solution to 50–100 μg/ml using 0.01 M HCl solution.
- 2. Add enough diluted collagen solution to coat dishes with 5–10 $\mu\text{g}/\text{cm}^2.$

Note: Use one to two milliliters for a 35 mm dish.

- 3. Incubate at room temperature for one hour.
- 4. Carefully aspirate remaining solution.
- 5. Rinse well to remove acid, using PBS or serum free medium.
- 6. Plates may be used immediately or air dried. They may then be stored at 2–8 °C for up to one week under sterile conditions.

RC,MAM 09/16-1