Collagen Coating Flasks

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National Institutes of Health

Reagents

Type I Rat Tail Collagen
Beckton-Dickenson Biosciences, Cat. 35-4236
Glacial acetic acid
Phosphate buffered saline (PBS), Sterile
Water, sterile

Preparation

0.02M Glacial Acetic Acid (GAA)
Dilute Glacial Acetic Acid 1:700 into sterile water
(14μl GAA/10ml water)

Collagen Solution (stable for 3 months at 4°C):
Stock conc. will vary from batch to batch.
Dilute collagen to 50 mg/ml in 0.02 N GAA (for thin coating).
Note: collagen gel will form over wide range of dilutions up to 1:10 dilution.

Procedure

1. Add diluted type I rat tail collagen solution to the tissue culture vessel to be coated and rock back and forth to be sure the entire surface is covered. 1 ml is sufficient for a T25 flask, 3 ml for a T75 flask.

2. Place flasks on a level surface at RT for 60 min.

3. Aspirate off the collagen solution.

4. Rinse flask with at least 4 volumes of sterile 1XPBS.

5. Aspirate off the PBS.

6. Use immediately or leave flasks uncapped in the hood to dry.

7. Unused flasks should be capped and can be stored at 4°C for up to 2 weeks.