Cell Guidance Systems Ltd, Babraham Research Park, Cambridge CB22 3AT, UK

Data Sheet

Research Use Only

Product Name

OptiCol™ Rat Collagen Type I (Acid Soluble)
100 mg

Catalog Number

M18S

Description

OptiCol™ Rat Type I Acid Soluble Collagen contains 100 mg at a concentration of approximately 4 mg/mL in a 0.02M acetic acid solution (pH 2 to 3). Rat Tail collagen is soluble telo-collagen. Each product includes a bottle containing 100 mg of collagen solution accompanied with a bottle of pre-formulated neutralizing solution for the formation of a collagen gel

Source

Rat Tail Tendon

SDS PAGE

≥ 85% collagen contained within alpha, beta, and gamma bands, ≤ 15% collagen contained with bands traveling faster than alpha

Gelation time

< 60 mins

Fibril Formation assay

> 0.35 Abs. Units

Purity

> 99.9%

pH (prior to lyophliization)

approx 2-3

Storage

4°C

Concentration

3.5-4.5 mg/mL

Coating Procedure

Note: Employ aseptic practices to maintain the sterility of the product throughout the preparation and handling of the collagen and other solutions.

1. Transfer desired volume of OptiCol™ collagen solution from the bottle to a dilution vessel if required. Further dilute to desired concentration using sterile 0.1% acetic acid solution. A typical working concentration may range from 10 to 100 µg/mL. Note: Use these recommendations as guidelines to determine the optimal coating conditions for your culture system.
2. Add appropriate amount of diluted Rat Tail collagen to the culture surface.
3. Incubate at room temperature or 37°C, covered, for 1-2 hours.
4. After incubation, aspirate any remaining material.
5. Rinse coated surfaces carefully with sterile medium or PBS, avoid scratching surfaces.
6. Coated surfaces are ready for use. They may also be stored at 2-8°C damp or air dried if sterility is maintained.

3-D Gel Preparation Procedure

Note: Employ aseptic practices to maintain the sterility of the product throughout the preparation and handling of the collagen and other solutions.

Note: It is recommended that the collagen and other working solutions be chilled and kept on ice during the preparation of the collagen.

1. Determine the desired volume of OptiCol™ collagen required.
2. Transfer 1 part of chilled neutralization solution into a sterile mixing vessel or tube.
3. Transfer 9 parts of the OptiCol™ Rat Tail Collagen into the sterile mixing vessel or tube for a total of 10 parts.
4. Gently agitate the mixture or pipet up and down to mix. Vortexing is not recommended.
5. Dispense the OptiCol™ Rat Tail collagen mixture in the desired sterile plates or culture vessels.
6. Incubate at 37°C for 1 hour for gel formation.