



# Data Sheet

Research Use Only

## Product Name

OptiCol™ Human Collagen Type IV (lyophilized)  
5 mg

## Catalog Number

M23L

## Source

Human Placenta

## Storage

Prior to reconstitution: -20°C, after reconstitution: 2 to 10°C

## Description

OptiCol™ Collagen Type IV is the primary collagen found in the extracellular basement membranes separating a variety of epithelial and endothelial cells. It is a major component of the dermal-epidermal junction where it is mostly found in the lamina densa. It is a heterotrimeric molecule containing two  $\alpha$  1-like and one  $\alpha$  2-line chains. This Type IV collagen is isolated from human placenta and is purified using a multi-step process.

## Adventitious Agents

The human source material has been tested and found negative for hepatitis B virus, hepatitis C virus, and for human immunodeficiency virus-1 and -2 (HIV-1 and HIV-2).

## SDS Page

Characteristic

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## Preparation Procedure

1. Reconstitute the 1 mg vial with 1 ml of cold, sterile 0.25% acetic acid and mix by pipetting up and down several times. Allow to sit at 2 to 8°C swirling periodically for > 1 hour.

**Note: The resulting solution will be slightly hazy. If there are some insoluble materials present and you wish to remove it, aseptically centrifuge the material.**

2. Dilute the product to desired concentration with sterile 0.25% acetic acid. A typical final coating concentration may be 10 to 100  $\mu\text{g}/\text{cm}^2$ . Testing will likely be required to determine optimal concentrations required for different cell culture systems.

3. Add appropriate amount of diluted product to culture surface.

4. Incubate at room temperature or 37°C, covered, for 1-2 hours.

5. After incubation, aspirate any excess remaining material.

6. Rinse coated surface carefully with a sterile balanced salt solution. Avoid scratching surfaces.

7. Aspirate remaining material from coated surface.

8. Coated culture vessels are now ready to use. The coated culture vessels may be stored at 2 to 10°C.