



# Data Sheet

Research Use Only

## Product Name

OptiCol™ Human Collagen Type I (lyophilized)  
15 mg

## Catalog Number

M11L

## Description

OptiCol™ Human Collagen Type I is isolated from human neo-natal fibroblast cells. These cells are cultured in optimal conditions allowing these cells to naturally and efficiently secrete extracellular matrix which is processed and purified to produce human collagen. Manufactured under stringent quality standards with high lot-to-lot consistency. Made up of 97% Type I human collagen and 3% Type III collagen. Exhibits high monomer content (as measured by gel permeation chromatography).

## Source

Human Neo-Natal Fibroblast Cells

## SDS PAGE

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

## Gelation time

< 90 mins

## Fibril Formation assay

> 0.5 Abs. Units

## Purity

> 99.9%

## pH (prior to lyophilization)

approx 2

## Storage

Lyophilized product is very stable at -20°C (24 months). Reconstituted material should be stored at 4°C and used within 3 months.

## Reconstitution

Dilute in 5 ml 0.01N HCl to yield 3 mg/ml solution

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## Coating Procedure

1. Remove required quantity of collagen from the bottle and dispense into a dilution vessel.
2. Dilute OptiCol™ in water to ~50 to 100 µg/ml (~1:30). A 0.01 N HCl solution may also be used.
3. Swirl contents gently until material is completely mixed.
4. Add appropriate amount of diluted OptiCol™ material to the culture surface ensuring that the entire surface is coated.
5. Incubate at room temperature or 37°C, covered, for 1- 2 hours.
6. After incubation, aspirate any remaining material.
7. Rinse coated surfaces carefully with sterile medium or PBS, avoid scratching surfaces.
8. Coated surfaces are ready for use. They may also be stored at 2-8°C damp or air dried if sterility is maintained.