

Life Science Products
Collagen and Gelatin
Product Guide

Collagen for Cell Culture

Cellmatrix®

Collagen for Three-dimensional Culture / Collagen for Coating

- ★ Collagen solution at pH 3 with a concentration of 3 mg/mL
- Storage condition: Cold storage (4°C to 8°C)
- Expiration date: One year from the date of manufacture



Type I – A

- Ideal for collagen gel culture.
- The gel has high transparency and ensures ease of microscopic observation.
- Acid extraction of collagen derived from porcine tendons.

Type I – P

- Recommended for collagen gel culture and collagen-coated culture.
- Forms a gel softer than Type I–A.
- Pepsin-solubilized collagen derived from porcine tendons.

Type I – C

- Recommended for collagen-coated culture.
- Pepsin-solubilized collagen derived from porcine skin.

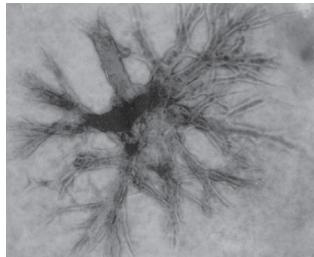
Type III

- Recommended for collagen-coated culture.
- Not turning into a gel.
- Type III collagen derived from porcine skin.

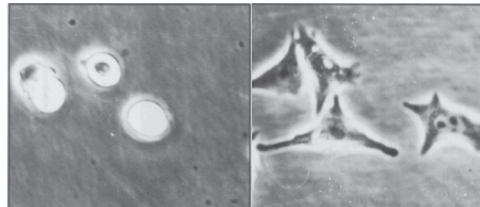
Type IV

- Recommended for collagen-coated culture.
- Not turning into a gel.
- Type IV collagen derived from bovine lens capsules purified with pepsin treatment.

Growth morphology of mouse breast cancer cells cultured in an embedded collagen gel



Spreading activity of cultured cells



Uncoated

Collagen coated

Collagen Gel Culture Kit / Concentrated Culture Solution / Buffer Solution for Reconstitution

■ Storage condition: Cold storage (4°C to 8°C) ■ Expiration date: In four months



Collagen Gel Culture Kit

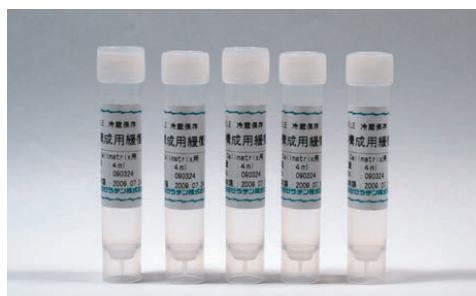
■ Contents

Cellmatrix Type I-A	20 mL	One bottle
Concentrated culture solution (Ham's F-12 and MEM)	5 mL each	One bottle each
Buffer solution for reconstitution	4 mL	Five bottles



Concentrated Culture Solution

Concentrated culture solution adjusted for collagen gel culture, Ham's F-12 culture solution as a 10x concentrated product, MEM-Hanks' culture solution, DF culture solution (DME:F-12=1:1), 199 culture solution, DME culture solution as 5x concentrated product, and RPMI-1640 culture solution are available.



Buffer Solution for Reconstitution

Buffer solution for reconstitution adjusted for collagen gel culture

■ Composition

Sodium hydroxide	50mM
Sodium hydrogen carbonate	260mM
HEPES	200mM

Cellmatrix price list (excluding consumption tax)

Product name	Content	Standard price
Cellmatrix Type I-A	20 mL	¥10,000
	100 mL	¥30,000
Cellmatrix Type I-P	20 mL	¥7,000
	100 mL	¥20,000
Cellmatrix Type I-C	20 mL	¥7,000
	100 mL	¥20,000
Cellmatrix Type III	5 mL	¥11,000
	20 mL	¥33,000
	100 mL	¥110,000
Cellmatrix Type IV	5 mL	¥17,000
	20 mL	¥51,000
	100 mL	¥170,000
Collagen gel culture kit	1 kit	¥16,000
Ham's F-12 concentrated culture solution	100 mL	¥5,000
MEM-Hank's concentrated culture solution	100 mL	¥5,000
DF concentrated culture solution	100 mL	¥5,000
199 concentrated culture solution	100 mL	¥5,000
DME concentrated culture solution	100 mL	¥6,000
RPMI-1640 concentrated culture solution	100 mL	¥5,000
Buffer solution for reconstitution	4mL 15 bottles	¥6,000



Research-dedicated reagents

The above products are sold for research purposes only. Regardless of purposes, such as the production of drugs, product quality control, various diagnostic tests, medical treatment, or other researches, do not use the products for the human body.

* Contact the Bio-Medical Department of Kurabo Industries Ltd. for inquiries about or orders for the above products.
<Tel. +81-72-820-3079; Fax. +81-72-820-3095>

Collagen for Cell Culture

Cellmatrix®

Method of Collagen Gel Culture

Prepare the following three types of solutions, i.e, A, B, and C.

- A: Cellmatrix Type I–A or I–P
- B: 10x concentrated culture solution¹⁾
- C: Buffer Solution for Reconstitution

Mix A and B well at a ratio of 8 to 1 while cooling A and B so that the mixture will not produce foam. Then add C at a ratio of 1 and mix them together.¹⁾

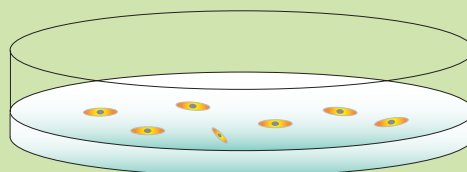
¹⁾In the case of using culture solution at a concentration of approximately 5x, the following mixture ratio will apply: A:B:C=7:2:1

Culture on collagen gel

The above collagen mixture will turn into a gel when the solution is dispensed to a culture dish and heated at 37°C for 30 minutes after cooling the mixture.



Spray the cell dispersion onto the gel. After the cells adhere to the gel, it will be possible to culture the cells like normal monolayer culture.



This is a method to culture the cells on the collagen gel.

Collagen gel-embedded culture

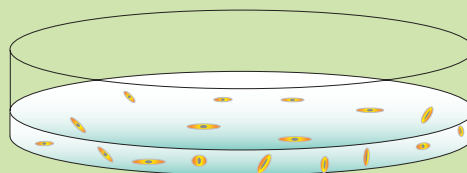
Add cell pellets collected by centrifugation to the above collagen mixture solution, and mix them with the solution.



Dispensed this collagen mixture solution to a culture dish and leave the solution at 37°C for 30 minutes so that the solution will turn into a gel.



After the gel is formed, overlay with culture solution and perform culture in an ordinary manner.



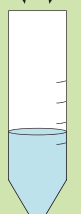
A method of three-dimensional cell culture in collagen gel

Method of Collagen Coating

Cellmatrix Type I-C
I-P, III, or IV

pH3 hydrochloric acid solution that is 10 times the amount of collagen*

* Adjust the dilution ratio depending on the purpose.

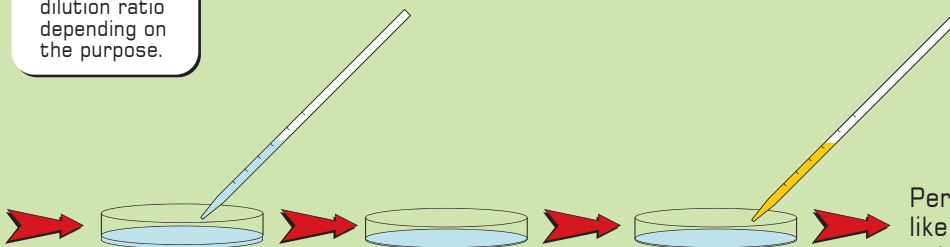


Put and thinly spread the diluted collagen solution to a dish and soak up the excessive amount of collagen.

Dry the collagen solution in a clean bench. Leave the collagen solution for 30 to 60 minutes.

Washed the coated dish twice with the culture solution.

Perform culture like monolayer culture.



Gelatin / Collagen for Tissue Engineering

beMatrix®

Low Endotoxin Gelatin

Maximum endotoxin level of 10EU/g

■ Storage condition: Room temperature

■ Expiration date: Three years from the date of manufacture



Gelatin LS-H

- Alkaline-treated gelatin derived from porcine skin.
- High Gel strength.

Gelatin LS-W

- Alkaline-treated gelatin derived from porcine skin.
- Low Gel strength.

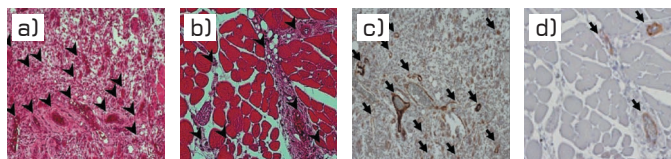
■ Safety test

A safety test was conducted and the product was confirmed to be negative to the following five items (cytotoxicity test, sensitization test, intradermal reaction test, pyrogen test, and antigenicity test).

Item	Result
Cytotoxicity test	Negative
Sensitization test (guinea pig)	Negative
Intradermal reaction test (rabbit)	Negative
Pyrogen test (rabbit)	Negative
Antigenicity test (guinea pig)	Negative

■ Usage example

The product and a crosslinking agent were used to prepare a hydrogel with a water content of 96%. Histological section (a and c), which were made from the hydrogel incorporating platelet rich plasma (PRP) with a basic fibroblast growth factor (bFGF), and specimens (b and d), which were made from the hydrogel incorporating with phosphate buffered saline (PBS), were injected in the location of ischemia in the lower limbs of the mice for a week. Then the subsequent angiogenesis was confirmed. Section a) and b) show HE-staining and Section c) and d) show α -smooth muscle actin (α -SMA) immunohistochemical staining. It is possible to use this product as a carrier for drug delivery system. *From reference 1).



■ References

- 1) Matsui, M. et al. Acta Biomaterialia 2012; 8: 1792.
- 2) Inoue, M. et al. Advanced Healthcare Materials 2012; 1: 573.
- 3) Inoue, M. et al. Colloids and Surfaces B: Biointerfaces 2011; 88: 260.
- 4) Tara, S. et al. Geriatr Gerontol Int 2011; 11: 527.
- 5) Nakagawa T. et al. BMC Medicine 2010; 8: 76.
- 6) Kawanaka H. et al. Am J Med Sci 2009; 338: 341.

Low Endotoxin Collagen Solution

Maximum endotoxin level of 0.5EU/mL

■ Storage condition: Cold storage (4°C to 8°C) ■ Expiration date: One year from the date of manufacture

Collagen AT

- Concentration: 3 mg/mL, pH3
- Acid extraction of collagen derived from porcine tendons.

Collagen TE

- Concentration: 5 mg/mL, pH3
- Pepsin-solubilized collagen derived from porcine skin.

beMatrix price list (excluding consumption tax)

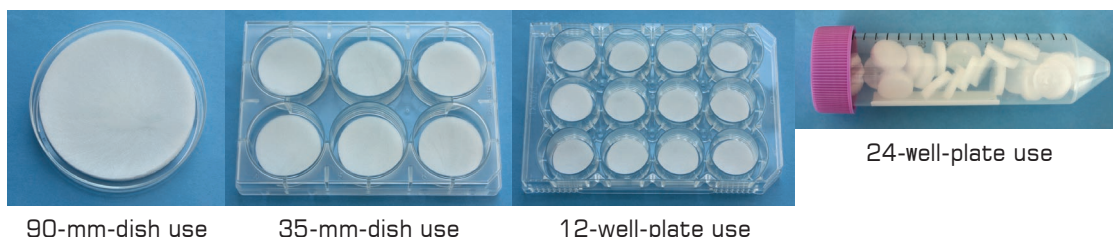
Product name	Content	Standard price
beMatrix Gelatin LS-H	10g	¥40,000
beMatrix Gelatin LS-W	10g	¥40,000
beMatrix Collagen AT	100mL	¥140,000
beMatrix Collagen TE	100mL	¥70,000

Series of Other Products

Collagen Sponge/Collagen BM

Collagen Sponge

- Storage condition: Room temperature
- Expiration date: One year from the date of manufacture
- Pepsin-solubilized collagen derived from porcine skin.
- γ -ray sterilization.
- Build to order products.



Collagen BM

- Storage condition : Freezing storage
- Expiration date: Two years from the date of manufacture
- Pepsin-solubilized collagen derived from porcine skin.
- Concentration: 5 mg/mL, pH3



Price list (excluding consumption tax)

Product name	Content	Standard price
Collagen Sponge 90-mm-dish use (approx. 80 dia.x 5 mm)	1 piece/case	¥ 8,000
Collagen Sponge 35-mm-dish use (approx. 32 dia.x 5 mm)	6 piece/case	¥ 12,000
Collagen Sponge 12-well-plate use (approx. 20 dia.x 3 mm)	12 piece/case	¥ 16,000
Collagen Sponge 24-well-plate use (approx. 15 dia.x 3 mm)	24 piece/case	¥ 16,000
Collagen BM	1 kg	¥ 60,000



Research-dedicated reagents

The above products are sold for research purposes only. Regardless of purposes, such as the production of drugs, product quality control, various diagnostic tests, medical treatment, or other researches, do not use the products for the human body.

Pharmacopoeia grade Gelatin GLS250

- Storage condition: Room temperature
- Expiration date: Three years from the date of manufacture
- Manufacturer-dedicated
 - Coating culture dishes.
 - Acid-treated gelatin derived from porcine skin.



Price list (excluding consumption tax)

Product name	Content	Standard price
Pharmacopoeia grade Gelatin GLS250	100g	¥ 10,000
	20g	¥ 4,000

Nitta Gelatin Inc.

Corporate Planning Department Life Sciences Laboratory

FUJIFILM
Value from Innovation

Wako

富士胶片 and 光(广州)贸易有限公司

FUJIFILM Wako (Guangzhou) Trading Corporation

官网: labchem.fujifilm-wako.com.cn

邮箱: wkgz.info@fujifilm.com

北京 13611333218 上海 021 62884751

广州 020 87326381 香港 852 27999019

官方微信

目录价查询

