High-Quality Collagen Solutions

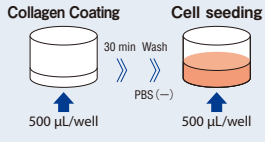
Solution type

High-Quality Collagen excellent for all types of research including cell biology, biochemistry, biophysics, tissue engineering, etc.

0.45 µm filtered

Usage Examples

Collagen coating for a 24 well plate

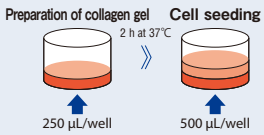


Collagen (3 mg/mL)	40 µL
5 mM AcOH	11.96 mL
Total amount	12 mL

Cell suspension 12.0 mL (/DMEM/10% FBS)

Pre-chill each solution

Collagen gel prep for a 24 well plate



Collagen (3 mg/mL)	2.0 mL
5×DMEM	1.2 mL
D. W.	2.2 mL
FBS	0.6 mL
1M NaOH	appropriate amount
Total amount	6 mL (pH7.3)

Cell suspension 12.0 mL (/DMEM/10% FBS)

Pre-chill each solution

Acid Soluble Collagen

- Strong gel strength
- Suitable for 3D-cell culture
- Superior fibril formation with remaining telopeptides and crosslinks.

Pepsin Solubilized Collagen

- Both N- & C-telopeptides are removed
- Suitable for coating culture vessels

Type Ⅰ Collagen

- Most abundant collagen in vertebrates
- Major component in collagen fibrils
- More than 95% pure

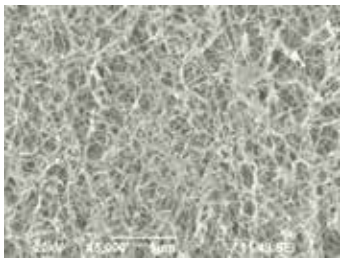
Type Ⅲ Collagen

- Abundant in skin tissues
- Rich in juvenile tissues and is important in wound healing
- Non-collagenous domains are removed by pepsin treatment
- P#892 107&108 contain about 20% of type I collagen

Type Ⅴ Collagen

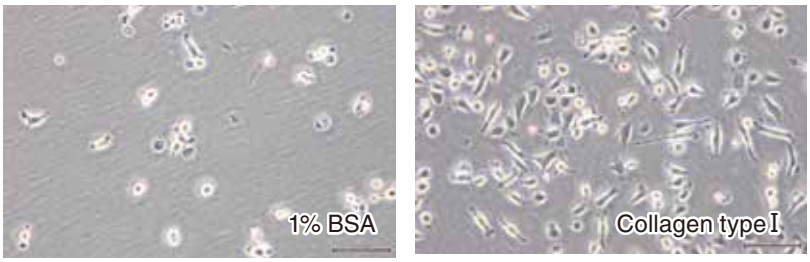
- Fibrillar collagen
- Rich in the cornea
- Relatively rich near the basement membrane
- Abundant in fine collagen fibrils
- Non-collagenous domains are removed by pepsin treatment

Reconstituted fibrils



Type Ⅰ collagen fibrils reconstituted at 37°C under physiological conditions. SEM image (5000×)

Excellent cell adhesive property



Adhesion of human keratinocyte cell line FEPE1L-8 at 1 day

Collagen for research reagents

Powder type

Features of Collagen Powder

- **Easy to adjust the concentration**
- **Able to use various solvents**
- **Native triple helical structure retained**

How to dissolve

- Dissolve in an acidic solution, such as 5 mM acetic acid or 1 mM hydrochloric acid.
- To increase the concentration of collagen, first dissolve in water, and then add the required amount of acid solution.
- When the concentration exceeds 5 mg/mL, handling becomes difficult due to the high viscosity.
- Can be dissolved up to a concentration of 10 mg/mL

Applications

- 2D and 3D cell culture substrates
- Bio-ink
- Production of collagen moldings
- R&D for drug delivery system (DDS)

Product code	Product name	Capacity
Solution type		
892 101	Type I collagen, Bovine skin, Acid soluble, 3mg/mL	20mL
892 102		100mL
892 103	Type I collagen, Bovine skin, Pepsin-solubilized, 3mg/mL	20mL
892 104		100mL
892 107	Type Ⅲ collagen, Bovine skin, Pepsin-solubilized, 3mg/mL	5mL
892 108		20mL
892 151	Type Ⅴ collagen, Bovine cornea, Pepsin-solubilized, 3mg/mL	1mL
892 111	Type I collagen, Porcine skin, Pepsin-solubilized, 3mg/mL	20mL
892 112		100mL
Powder type		
892 140	Type I collagen, Bovine skin, Acid soluble	100mg
892 141		500mg
892 142	Type I collagen, Bovine skin, Pepsin-solubilized	100mg
892 143		500mg
892 144	Type I collagen, Porcine skin, Pepsin-solubilized	100mg
892 145		500mg

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