

Coating of cell culture plasticware with Bovine Soluble Collagen for cell cultivation

Bovine Soluble Collagen is suitable as a thin coating for 2D cell culture in any culture dish. The nature-like matrix promotes authentic cell performance and positively influences adherence, growth and differentiation of your cells.

Before cell seeding the coated surface needs to be equilibrated with medium. To ensure good performance please follow this User Guide.

For technical support contact our team at sales@bio.viscofan.com.



Universal coating of cell culture vessels with soluble collagen

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GENERAL PRECAUTIONS

When working with soluble collagen, please use appropriate cell culture plastics, media, and reagents as well as aseptic techniques, and ensure adequate conditions for cell growth.

Due to the high collagen concentration, our soluble collagen has a high viscosity. To avoid pipetting errors, please pipette slowly to allow complete pouring in and out, respectively. Additionally, only dip the end of the pipette tip into the collagen solution and discard any collagen solution that sticks to the outside of the pipette tip before transferring the correct volume.

Required material

- Soluble collagen, **lot number 20200421-0001**
- Culture vessel
- dH₂O, or alternatively PBS or 0.1 M HAC
- Cell culture medium

Intended use

Bovine Soluble Collagen is intended for research use only. It is neither intended for human nor animal diagnostic, therapeutic use or any other clinical use.

Corresponding documents

- [Product Data Sheet](#)
Bovine Collagen Solution
- [User Guide](#)
Preparation of hydrogels for 3D culture

Disclaimer

All data and recommendations correspond to the present state of our knowledge; they are published without engagement. We reserve the right to make alterations and additions in line with technical developments without prior notice. The customer is obliged to check whether our products meet technical requirements.

Please contact us for questions or technical support:

Technical support

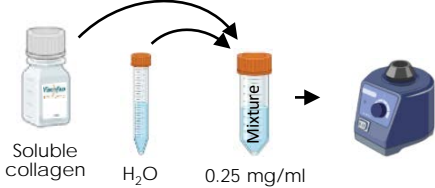
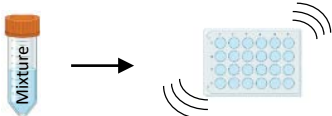



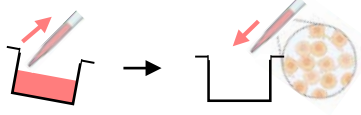
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COATING VOLUMES FOR DIFFERENT CULTURE VESSELS

Culture dish / flask	Growth area [cm ²]	Volume of diluted collagen solution (0.25 mg/ml) per well / flask [ml]
6-well	9.6	1.0
12-well	3.9	0.5
24-well	1.9	0.25
48-well	1.0	0.125
10 cm dish	60	6.0
T25 flask	25	3.0
T75 flask	75	10.0
T175 flask	175	15.0

COATING PROTOCOL

<p>STEP 1 Dilute Bovine Soluble Collagen in sterile dH₂O (alternatively in PBS or 0.1M HAc) to a concentration of 0.25 mg/ml and mix thoroughly.</p>	<p>Dilute collagen</p> 
<p>STEP 2 Pipette diluted collagen solution into the cell culture vessel (see table for volume per well) and sway gently to distribute it throughout the vessel.</p>	<p>Coat vessel</p> 
<p>STEP 3 Place vessel on a horizontal surface and incubate 30 min. at room temperature.</p>	<p>Incubate collagen</p> 
<p>STEP 4 Tilt vessel, aspirate excess liquid collagen solution and dry coated surface in a running laminar flow overnight with open lid.</p>	<p>Aspirate & dry</p> 
<p>STEP 5 Prior to cell seeding, overlay coated wells with medium for equilibration. Incubate for 30 min. at 37 °C / 5% CO₂.</p>	<p>Equilibrate in medium</p> 
<p>STEP 6 Aspirate medium and seed cells.</p>	<p>Aspirate & seed cells</p> 

PROBLEM	SOLUTION
1. Insufficient coating	<ul style="list-style-type: none"> • Check collagen concentration, avoid pipetting errors of the viscous collagen solution. • Adhere to recommended duration and temperature for the coating step to achieve optimal results. • The overnight drying step is crucial for coating efficiency.
2. Uneven coating (cells grow in patches)	<ul style="list-style-type: none"> • Mix collagen working solution (0.25 mg/ml) thoroughly to generate a homogenous solution. • Adjust pipetting volume to cover vessel surface evenly and completely.
3. Cells die or fail to grow	<ul style="list-style-type: none"> • It is crucial that the collagen coating is sufficiently equilibrated with culture medium prior to cell seeding to reach a physiological pH. • Please check whether enough cell culture medium has been added to or on top of the coated surface to feed the cells.



Bovine Soluble Collagen
Order-number: 500060635

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Use collagen scaffolds to improve performance of your 2D & 3D cultures!