

Protocol for Coating of Collagen Type I on culture ware

Coating Procedure

Note: Use these recommendations as guidelines to determine the optimal coating conditions for your culture system.

1. Remove required quantity of collagen from the bottle and dispense into a dilution vessel.
2. Dilute your Collagen Type I product of choice in water to ~50 to 100 µg/ml. 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 Collagen Type I product to the culture surface ensuring that the entire surface is coated.
5. Incubate at room temperature, covered, for 1-2 hours. Aspirate any remaining material. Alternatively, incubate at room temperature until surface is dry.
6. Rinse coated surfaces carefully with sterile medium or PBS, avoid scratching surfaces.
7. Coated surfaces are ready for use. They may also be stored at 2-10°C damp or air dried if sterility is maintained.

Culture Plate Size	Volumes of diluted Collagen Type 1 product in [µL]	Volumes of Cell Culture Media in [µL]
96 Well	50	150
48 Well	150	250
24 Well	300	600
12 Well	500	1.000
6 Well	1.600	4.000
T-25 flask	4.000	10.000
T-75 flask	12.000	30.000

Culture Plates with Inserts	Volume of Type I Collagen per Insert (µL)	Volume of Cell Culture Media (µL) added outside the insert	Volume of Cell Culture Media (µL) added into the Insert
96-Well	25	250	50
48-Well	40	500	80
24-Well	50	1.000	100
12 Well	250	1.400	400
6 Well	600	2.000	1.000

Collagen Type I Coating Products

Species	Type-1 - Atelocollagen	Type-1 - Telocollagen
bovine	PureCol® Solution, 3 mg/ml (#5005-100ML) Nutragen® Solution, 6 mg/ml (#5010-50ML) FibriCol® Solution, 10 mg/ml (#5133-20ML)	TeloCol®-3 Solution, 3 mg/ml (#5026-50ML) TeloCol®-6 Solution 6 mg/ml (#5225-1KIT) TeloCol®-10 Solution, 10 mg/ml (#5226-20ML)
human	VitroCol® Solution 3 mg/ml (#5007-20ML)	
rat		RatCol® Rat Tail Type I Collagen + Neutralizing Solution, 4 mg/ml (#5153-1KIT) RatCol® High Concentration Rat Tail Collagen Solution 10 mg/ml (#HCRTC-100mg)

Collagen coating has been used successfully for various cell types, including endothelial cells (e.g., cardiovascular, umbilical vein (HUVEC), skin, and lung airway), epithelial cells (e.g., skin, breast, bladder, and kidney), fibroblasts, muscle cells, and many others.

For a complete list of human primary cells and suitable growth media, visit <https://cellsystems.eu/product-category/cells-media/>



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