



## 0.2% Gelatin Solution (GSN)

Catalog number: 0423

### Product Description

Gelatin is a heterogeneous mixture of water-soluble proteins of high-average molecular weights derived from collagen. 0.2% Gelatin Solution (GSN) is used to coat the surface of culture vessels to promote cell attachment. It is recommended for the culture of differentiated hESC cells [1, 2], certain primary and immortalized cell types.

### Concentration

Sterile 0.2% gelatin from porcine skin in cell culture grade water.

### Storage Conditions

Product is stable for 2 years and remains unchanged from the date of receipt when stored at 2 - 8° C. Keep sterile.

### Applications

Substrate for cell culture adhesion. Optimal conditions for attachment must be determined for each cell line and application. Recommended concentration for normal human cell attachment is 100-200  $\mu\text{g}/\text{cm}^2$ .

### Coating Procedure

The recommended coating concentration is 0.2% but may need optimization depending on cell type.

A. The following tables are a guide for the suggested volumes required per flask or plate well:

Flask	0.2% Gelatin (ml)
T-25	2.5
T-75	7.5
T-175	13

Wells	0.2% Gelatin (Amount/Well)
96	100 $\mu\text{L}$
48	300 $\mu\text{L}$
24	500 $\mu\text{L}$
12	1.0 mL
6	1.5-2.0 mL

- B. Pipette the appropriate amount of 0.2% Gelatin solution in each flask or well. Tilt to ensure even coverage. Incubate for 1 hour at 37° C.
- C. Aspirate the Gelatin solution in a sterile field just before adding medium and cells.
- D. Coated plates can be stored in sterile packaging at room temperature for up to one or two weeks at 4° C. Cover or wrap to avoid the plates drying out.

### References

- [1]. Reubinoff BE, Pera MF, Fong CY, Trounson A, Bongso A. (2000). Embryonic stem cell lines from human blastocysts: somatic differentiation in vitro. *Nature Biotechnology*. Apr;18(4):399-404.
- [2]. Ko, J, Kolehmainen, K. , Ahmed, F, Jun, M. B.G, Willerth, S.M. (2012). Towards high throughput tissue engineering: development of chitosan-calcium phosphate scaffolds for engineering bone tissue from embryonic stem cells. *Am J Stem Cell*;1(1):81-89.