

Product Information

Fibronectin from human fibroblasts cell culture derived

Catalog Number **F0556**
Storage Temperature -20°C

Product Description

Fibronectin is a high molecular mass extracellular matrix glycoprotein involved in many cellular processes, including tissue repair, embryogenesis, blood clotting, and cell migration/adhesion. It is used *in vitro* as a substrate to enhance adherence and proliferation of many cell types.

This fibronectin product is produced by human fibroblasts and then purified biochemically. It is supplied sterile at a concentration of ~ 0.5 mg/ml in CAPS saline buffer.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Thaw the fibronectin product slowly at $2-8^{\circ}\text{C}$. The solution should be clear. Do not vortex or shake vigorously to resuspend the fibronectin as this will cause the fibronectin to “crash” out of solution, which is irreversible.

Storage/Stability

The product is shipped on dry ice and storage at -20°C is recommended. Under these conditions the product is stable for least 2 years.

Procedure

Coating Procedure

Optimal conditions for attachment must be determined for each cell line and application.

1. Slowly thaw the fibronectin solution at $2-8^{\circ}\text{C}$. Do not vortex or shake vigorously to resuspend the fibronectin as this will cause the fibronectin to “crash” out of solution, which is irreversible.
2. Dilute the product in sterile Hank's Balanced Salt Solution (HBSS). Dilutions vary with each application, but routinely fall in the range of $1-10\text{ }\mu\text{g/ml}$. Coat the plates with a minimal volume. See Table 1 for suggested volumes; however, each application may vary.

Table 1.

Suggested Volumes of Fibronectin Solution per Well

Plate Size	Volume of Fibronectin Solution
96-well plate	75 μl per well
24-well plate	500 μl per well
6-well plate	2.4 ml per well

3. Incubate at 37°C for 1–2 hours.
4. Wash 3 times with sterile HBSS and plate the cells.

Fibronectin coated, cell culture plasticware and cover slips may be stored for ~ 1 month at $2-8^{\circ}\text{C}$.

References

1. Kleinman, H.K., Preparation of basement membrane components from EHS tumors. Curr. Protoc. Cell Biol., Chapter 10, Unit 10.2 (2001).
2. Potts, J.R., and Campbell, I.D., Fibronectin Structure and Assembly. Curr. Cell Bio., **6**, 648-655 (1994).
3. Potts, J.R., and Campbell, I.D., Structure and Function of Fibronectin Modules. Matrix Bio., **15**, 313-320 (1996).

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