

## Fibronectin, Human

### Lyophilized, 5 mg

Catalog Number 5080

#### DESCRIPTION

Fibronectin is a broad range natural cell adhesion factor found as a dimer in plasma and in multimeric form in the extracellular matrix and on cell surfaces. Fibronectin is a glycoprotein found at a size of 220-250 kD subunits lined by two disulfide bonds. Fibronectin is used to promote cell attachment and adhesion in a variety of cells. In addition to its cell attachment functions, Fibronectin may involve interactions with collagen, heparin and other cell surface glycosaminoglycans.

Advanced BioMatrix's human Fibronectin is lyophilized and provided in a 5 mg package size. The product is formulated in a 1.126 mg glycine and 0.058 mg sodium chloride per mg fibronectin solution. Fibronectin is purified from human plasma by the method of Vuento & Vaheri<sup>(1)</sup>.

#### APPLICATIONS

Fibronectin is used as a thin coating at 5 µg/cm<sup>2</sup>. The optimal concentration for cell attachment and culture may differ for various cell types. Some experimentation may be required to determine the optimal conditions for individual cell culture systems.

#### CHARACTERIZATION

**Source:** Human plasma

**Purity:** Fibronectin has a purity of >95% as determined by SDS-PAGE.

**Package Size:** 5 mg/vial

**pH:** Fibronectin is formulated in buffer with the pH being approximately 7.

**Filtration:** Filtered through a 0.2 µ filter

**Storage:** 2 to 10 °C prior to reconstitution - It is recommended that Fibronectin be stored at -20°C after reconstitution. Repeat thawing and freezing to be avoided.

#### INSTRUCTIONS FOR USE

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

1. Add 5 ml of sterile water to yield a concentration of 1 mg/ml.

2. Incubate for 30-60 minutes at 37°C to dissolve. **Do not agitate.**

Note: Upon reconstitution, the solution may contain a small amount of insoluble aggregated material. This phenomenon is inherent to fibronectin and does not affect product performance.

3. Further dilute the 1 mg/ml solution with PBS or cell culture medium to achieve desired working concentration.
4. For coating of cell culture plasticware, 5 µg/cm<sup>2</sup> is typical.
5. Incubate for approximately 45 minutes at 15 to 25°C.
6. Aspirate remaining material being careful to not touch the coated surface.
7. It is possible, but not necessary, to rinse the coated surface with PBS or medium.
8. Plates are ready for use. The coated culture vessels should be used immediately and should not be allowed to dry.

#### PRECAUTIONS

THE RAW MATERIAL SOURCE FOR THIS PRODUCT IS HUMAN PLASMA. EACH PLASMA DONOR IS TESTED FOR THE PRESENCE OF INFECTIOUS VIRUSES (HBSAG, HIV-1AG, ANTI-HIV-1/2 AND ANTI-HCV) AND FOUND NON-REACTIVE. HOWEVER, NO KNOWN TEST METHOD CAN OFFER COMPLETED ASSURANCE OF SAFETY. APPROPRIATE SAFETY AND PERSONAL PROTECTIVE PRACTICES SHOULD BE FOLLOWED WHEN HANDLING THIS PRODUCT. HANDLE AS IF POTENTIALLY INFECTIOUS.

THIS PRODUCT IS FOR RESEARCH USE ONLY, NOT FOR ANY HUMAN USES.

#### REFERENCES

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