

## **Fibronectin, Human purified protein**

### ***Product Data Sheet***

**Cat. No.: RP1724480200**

200 ug

**Cat. No.: RP1724481000**

1 mg

#### **Introduction:**

Plasma fibronectin level is elevated in severe coronary artery disease. Increased plasma fibronectin levels are related with venous thromboembolism (VTE) particularly in males, and extend the probable association between biomarkers and risk factors for arterial atherothrombosis and VTE. Fibronectin plays a role in several cellular processes, including tissue repair, embryogenesis, blood clotting, and cell migration/adhesion.

Fibronectin consists in two main forms: 1) as an insoluble glycoprotein dimer that serves as a linker in the extracellular matrix and 2) as a soluble disulphide linked dimer found in the plasma. The plasma form is produced by hepatocytes, and the ECM form is synthesized by fibroblasts, chondrocytes, endothelial cells, macrophages, as well as certain epithelial cells. Fibronectin also takes part as a general cell adhesion molecule by anchoring cells to collagen or proteoglycan substrates. Fibronectin organizes cellular interaction with the ECM by binding to different components of the extracellular matrix and to membrane-bound Fibronectin receptors on cell surfaces.

#### **Description:**

Human fibronectin purified from human plasma having a molecular weight of 440kDa.

#### **Source:**

*Human Plasma*

#### **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Formulation:**

The Fibronectin was lyophilized from a non-sterile 2 mg/ml buffer of 10mM sodium phosphate, pH 7.5 and 0.15M NaCl.

#### **Solubility:**

Purified fibronectin has a tendency to form insoluble aggregates upon reconstitution. We suggest reconstituting the 1mg Fibronectin with a chaotropic agent such as urea (4M – 5M) at room temperature at a concentration of 0.2mg/ml using sterile water.

Let stand 1-2 hours.

When using the protein as an attachment factor, wash the urea off after attaching the fibronectin to the growth surface (plate or dish).

#### **Stability:**

Lyophilized Fibronectin although stable at room temperature for 1 week, should be stored desiccated below -18°C.

Upon reconstitution Fibronectin should be stored at 4°C between 2-7 days and for future use below -18°C.



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Please prevent freeze-thaw cycles.

**Purity:**

Greater than 95.0% as determined by analysis by SDS-PAGE.

**Cell Culture Application:**

Fibronectin is useful for the induction of cell attachment to a variety of surfaces including plastic and glass tissue culture labware, petri dishes, coverslips, microcarrier beads, etc. Fibronectin is useful for growth and maintenance of cells in low serum conditions. In general, the reconstituted fibronectin should be diluted with sterile physiological saline or serum-free medium to a concentration of 10-50ug/ml.

**Usage:**

BioVendor's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.