



Fibronectin Human, Purified Protein (Plasma)

Product Data Sheet

Cat. No.:	A1448200	A14481MG	A144810MG
Size:	200 µg	1 mg	10 mg

DESCRIPTION

Fibronectin Human, Purified Protein is a native protein purified from Human plasma. It has a molecular weight of 440 kDa.

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 10-50 µg/ml.

SUMMARY

Fibronectin is an ubiquitous extracellular glycoprotein that exists in a soluble form in body fluids and in an insoluble form in the extracellular matrix. It plays a major role in many important physiological processes, such as embryogenesis, wound healing, hemostasis, thrombosis, 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's importance during cancer progression has further been shown. It represents an active element in the process of T cell activation in the immune cascade triggered by organ transplantation. 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 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.

update.: 2023.12

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OTHER NAMES

Cold insoluble globulin, FINC, LETS, MSF, FN

TYPE

Native Protein

SOURCE

Human plasma

PURITY

≥ 95.0%

FORMULATION

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

RECONSTITUTION

We suggest reconstituting 1 mg Fibronectin with a chaotropic agent such as urea at room temperature at a concentration of 0.2 mg/ml using sterile water. Let stand 1-2 hours. The recommended concentration is 4M-5M urea.

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

SHIPPING

At ambient temperature. Upon receipt, store the product at 4°C.

STORAGE/EXPIRATION

Store the lyophilized fibronectin at 4° C. Upon reconstitution, fibronectin should be stored at 4° C for 2 weeks and for future use below -18° C. **Please prevent freeze-thaw cycles.**

USAGE

This product is intended for **Laboratory Research Use Only**. Not for use in diagnostic or therapeutic procedures. This product may not be used as a pharmaceutical or veterinary drug, agricultural product, or food additive.

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