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Fibronectin Recombinant

Fibronectin Human Recombinant
NTP0029

Product Overview

Name	Fibronectin Recombinant

Description

Fibronectin Human Recombinant

Introduction

Fibronectin takes part in several cellular processes, including tissue repair, embryogenesis, blood clotting, and cell migration/adhesion.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 consists in 2 main forms: 1) as an insoluble glycoprotein dimer that serves as a linker in the etracellular 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 alos 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.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 8.0, 150 mM NaCl, with 5 % Trehalose and 0.02 % Tween-20.

Stability

Lyophilized Fibronectin although stable at room temperature for 3 weeks, 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. Please prevent freeze-thaw cycles .

Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity

Was measured by its ability to support cell attachment and spreading when used as a substratum for cell culture. The recommended concentration in this application for this effect is typically 1-5 µg/cm2. Fibronectin can also be added to the media to support cell spreading at a concentration of 0.5-50 µg/ml. Optimal concentrations will need to be determined for individual user applications.

Solubility

It is recommended to reconstitute the lyophilized Fibronectin in sterile 18MΩ-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

Fibronectin Recombinant is for research use only and not for use in diagnostic or therapeutic procedures.