



Synonym

Fibronectin,FN1,CIG,ED-B,FINC,FN,FNZ,GFND,GFND2,LETS,MSF

Source

Recombinant Fibronectin fragment, premium grade(FIN-H5116) is expressed from E. coli cells. It contains AA Pro 1361 - Ser 1637 & Ala 1812 - Thr 2107 (Accession # P02751-15).

Predicted N-terminus: Met

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

Fibronectin (Pro 1361 - Ser 1637) Fibronectin (Ala 1812 - Thr 2107) P02751-15 P02751-15

This protein carries no "tag".

The protein has a calculated MW of 62.6 kDa. The protein migrates as 60 kDa±3 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 0.01 EU per µg by the LAL method.

Host Cell Protein

<0.5 ng/µg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Supplied as 0.2 µm filtered solution in 12.5 mM Sodium citrate, pH6.2 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with blue ice, please inquire the shipping cost.

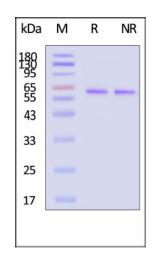
Storage

Please avoid repeated freeze-thaw cycles.

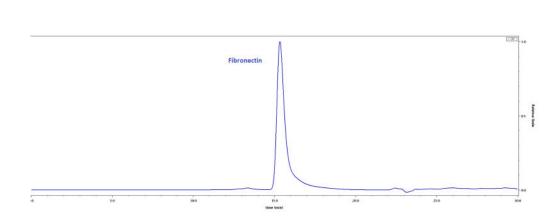
This product is stable after storage at:

- The product MUST be stored at -20°C or lower upon receipt;
- -20°C for 36 months under sterile conditions.

SDS-PAGE



SEC-HPLC





Recombinant Fibronectin fragment, premium grade

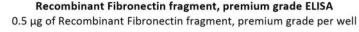
Catalog # FIN-H5116

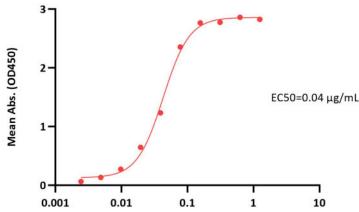


Recombinant Fibronectin fragment, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Ribbon Pre-stained Protein Market

Bioactivity-ELISA





 $Biotinylated \ Human \ ITGA4\&ITGB1 \ Heterodimer \ Protein, His, Avitag\&Tag \ Free \ Conc. \ (\mu g/mL)$

Immobilized Recombinant Fibronectin fragment, premium grade (Cat. No. FIN-H5116) at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human ITGA4&ITGB1 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT1-H82W1) with a linear range of 0.002-0.078 μ g/mL (QC tested).

The purity of Recombinant Fibronectin fragment, premium grade (Cat. No. FIN-H5116) was greater than 90% as determined by SEC-HPLC.

Background

Fibronectin (Fn) is a glycoprotein whose size ranges from 230 to 270 kDa and usually exists as a dimer, covalently linked by a pair of disulfide bonds at the C-termini. Each monomer consists of three repeating units: 12 Type I, 2 Type II, and 15–17 Type III domains which combined account for 90% of the FN sequence. The extracellular matrix (ECM) plays a key role as both structural scaffold and regulator of cell signal transduction in tissues. Fibronectin is one of the major ECM proteins in the trabecular meshwork (TM). It is found in the sheath material surrounding the elastin tendons that enter the TM from the ciliary muscle within the ciliary body. In times of ECM assembly and turnover, cells upregulate assembly of the ECM protein, FN. FN is assembled by cells into viscoelastic fibrils that can bind upward of 40 distinct growth factors and cytokines. These fibrils play a key role in assembling a provisional ECM during embryonic development and wound healing. Fibril assembly is also often upregulated during disease states, including cancer and fibrotic diseases.

Clinical and Translational Updates

