

[Go to Product page](#)

Datasheet for ABIN7520017

Fibronectin 1 Protein (FN1) (His tag)

Overview

Quantity:	10 µg
Target:	Fibronectin 1 (FN1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Fibronectin 1 protein is labelled with His tag.

Product Details

Purpose:	Active Recombinant Human Fibronectin/CIG/FN1 Protein
Sequence:	NIDRPKGLAF TDVDVDSIKI AWESPQQQVS RYRVTYSSPE DGIHELFPAP DGEEDTAELQ GLRPGSEYTV SVVALHDDME SQPLIGTQST
Specificity:	Asn1722-Thr1811
Purity:	> 90 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Biological Activity Comment:	Measured by the ability of the immobilized protein to support the adhesion of NIH-3T3 mouse embryonic fibroblast cells. When cells are added to Fibronectin coated plates (2.5 µg/mL and 100 µL/well), approximately 30%-40% cells will adhere specifically after 30 minutes at 37°C.

Target Details

Target:	Fibronectin 1 (FN1)
---------	---------------------

Target Details

Alternative Name: Fibronectin/CIG/FN1 ([FN1 Products](#))

Background: Description: Fibronectin (FN) is a glycoprotein component of the extracellular matrix of the extracellular matrix (ECM) with roles in embryogenesis, development, and wound healing. More recently, FN has emerged as player in platelet thrombus formation and diseases associated with thrombosis including vascular remodeling, atherosclerosis, and cardiac repair following a myocardial infarct. Each monomer of FN consists of three types of homologous repeating units, that is 12 type I repeats, two type II repeats and 15-17 type III repeats. The occurrence of multiple isoforms results from alternative mRNA splicing of the ED-A, ED-B and III-CS regions, and subsequent post-translational modification. As an ECM component and one of the primary cell adhesion molecules, Fibronectin can be a ligand for fibrin, heparin, chondroitin sulfate, collagen/gelatin, as well as many integrin receptors through which FN mediates the variety of cellular signaling pathways. The study of solid human tumors showed among the early signs of malignant transformation the fragmentation of pericellular FN, concomitant with the increase of its production by the peritumoral stroma. These results should encourage further investigations concerning the potential importance of Fn production and breakdown during cancer progression. FN1 expression has been described to increase significantly from the morula towards the early blastocyst stage, suggesting that FN1 may also be involved in early blastocyst formation. The fragment 2 of FN comprises the first 7 FN type III repeats and is suggested to be important for self association during fibril growth via the key module III2.

Name: FN1,CIG,ED-B,FINC,FN,FNZ,GFND,GFND2,LETS,MSF,fibronectin

Gene ID: 2335

UniProt: [P02751](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [Carbohydrate Homeostasis](#), [Autophagy](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Handling

Buffer:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80°C for long term. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.