FN1
Recombinant Human Fibronectin Fragment 2 (His Tag)

Catalog No.	CRH447A-His CRH447B-His	**Quantity:**	100 µg 200 µg
Alternate Names:	Fibronectin, FN, Cold-insoluble globulin, CIG		
Description:	Fibronectin 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, concommitent 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.		
UniProt ID:	P02751		
Accession Number:	NP_997639.1		
Protein Construction:	A DNA sequence encoding the Fragment 2 (Ser 607-Pro 1265) of humanFibronectin was expressed with a C-terminal polyhistidine tag.		
Source:	HEK293 Cells		
Molecular Weight:	The secreted rhFibronectin 1 fragment2 (FN1.2) consists of 670 amino acids and has a calculated molecular mass of 73.2 kDa. As a result of glycosylation, rhFN1.2 migrates at ~85-100 kDa band in SDS-PAGE under reducing conditions.		
Formulation:	Lyophilized from sterile PBS, pH 7.2 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Purity:	> 97 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg protein as determined by the LAL method.		

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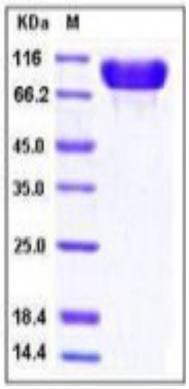
Biological Activity: Measured by the ability of the immobilized protein to support the adhesion of NIH-3T3 mouse embryonic fibroblast cells. When cells are added to Vitronectin coated plates (2.5 µg/mL and 100 µL/well), approximately 35%-60% cells will adhere specifically after 35 minutes at 37°C.

Predicted N-terminal: Ser 607

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

SDS-PAGE



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