Active Fibronectin (FN)

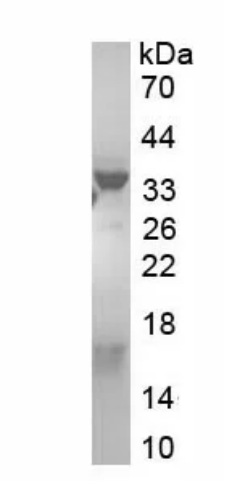
Catalog#:PEH12046

概述（Summary）

别称（Alternative Names）	FN1; CIG; FINC; LETS; MSF; GFND2; Anastellin; Migration-Stimulating Factor; Cold-Insoluble Globulin; Large, External, Transformation-Sensitive Protein
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gly313-Ser607】
Accession #	P02751
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	34.9 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in ddH_2O to a concentration of 0.1-0.5 mg/mL. Do not vortex.
背景介绍（References）	Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. Participates in the regulation of type I collagen deposition by osteoblasts.; Binds fibronectin and induces fibril formation. This fibronectin polymer, named superfibronectin, exhibits enhanced adhesive properties. Both anastellin and superfibronectin inhibit tumor growth, angiogenesis and metastasis. Anastellin activates p38

MAPK and inhibits lysophospholipid signaling.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

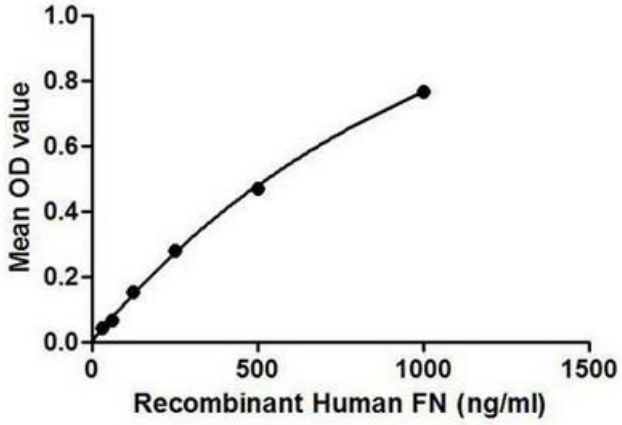


Figure 1. The binding activity of FN with DCN.

Fibronectin (FN) is a high-molecular weight (~440kDa) glycoprotein of the extracellular matrix that binds to membrane-spanning receptor proteins called integrins. Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectin has numerous functions. For example, it involved in cell adhesion, cell motility, opsonization, wound healing, maintenance of cell shape, and so on. Besides, Decorin (DCN) has been identified as an interactor of FN, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FN and recombinant human DCN. Briefly, FN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to DCN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-FN pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of of FN and DCN was shown in Figure 1, and this effect was in a dose dependent manner. As FN has the function of cell adhesion, we measure the activity of FN by the ability of the immobilized protein to support the adhesion of NIH-3T3 mouse embryonic fibroblast cells. When 5 x 104 cells/well are added to recombinat human FN coated plates (10 μg/mL with 100 μL/well), approximately 70-80% will adhere after 3 hour incubation at 37℃. The adhesion of NIH-3T3 after 3 hour incubation at 37℃ observed by inverted microscope was shown in Figure 2.

注意事项（Note）

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