

**APA037Hu01 10µg**

**Active Fibronectin (FN)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

**FOR RESEARCH USE ONLY**

**NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES**

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Gly313~Ser607

**Tags:** N-terminal His-tag

**Purity:** >90%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Buffer Formulation:** PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

**Applications:** Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 6.2

**Predicted Molecular Mass:** 34.9kDa

**Accurate Molecular Mass:** 17&34kDa as determined by SDS-PAGE reducing conditions.

## **[ USAGE ]**

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

### **[ SEQUENCE ]**

GVVYSVGM QWLKTQGNKQ MLCTCLGNVG SCQETAVTQT  
YGGNSNGEPC VLPFTYNGRT FYSCTTEGRQ DGHLWCSTTS NYEQDQKYSF  
CTDHDTVLVQT RGGSNSNGALC HFPFLYNNHN YTDCTSEGRR DNMKWC GTTQ  
NYDADQKFGF CPMAAHHEEIC TTNEGVMYRI GDQWDQHDM GHMMRCTCVG  
NGRGEWTCIA YSQLRDQCIV DDITYNVNDT FHKRHEEGHM LNCTCFGQGR  
GRWKCDPVDQ CQDSETGTFY QIGDSWEKYV HGVRYQCYCY GRGIGEWHCQ  
PLQTYPS

### **[ ACTIVITY ]**

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 100µL were then transferred to DCN-coated microtiter wells and incubated for 2h at 37°C. 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°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of FN and DCN was shown in Figure 1, and this effect was in a dose dependent manner.

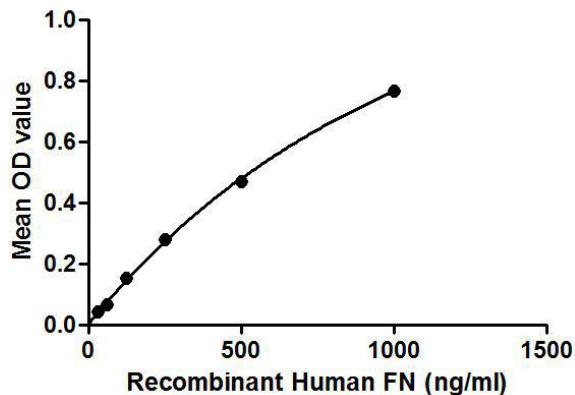


Figure 1. The binding activity of FN with DCN.

### [ IDENTIFICATION ]



Figure 2. SDS-PAGE

Sample: Active recombinant Fibronectin, Human

### [ IMPORTANT NOTE ]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.