APA037Mu02 100μg
Active Fibronectin (FN)
Organism Species: ***Mus musculus (Mouse)***
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Gly2117~Leu2236
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 .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.4
Predicted Molecular Mass: 14.6kDa
Accurate Molecular Mass: 18kDa 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 2-8ºC for one month.
Aliquot and store at -80ºC 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 37ºC 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]

GYDT ENGIQLPGTT HQQPSVGQQM IFEEHGFRRT
TPPTAATPVR LRPRPYLPNV DEEVQIGHVP RGDVDYHLYP HVPGLNPNAS
TGQEALSQTT ISWTPFQESS EYIISCQPVG TDEEPL

[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, Lysyl Oxidase (LOX) has been identified as an interactor of FN, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse FN and recombinant human LOX. Briefly, LOX were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100ul were then transferred to FN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-LOX 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. Measured by its binding ability in a functional ELISA. When Recombinant FN is Immobilized at 2 ug/mL(100 uLwell), the concentration of LOX that produces 50% optimal bindingresponse is found to be approximately0.03ug/mL.

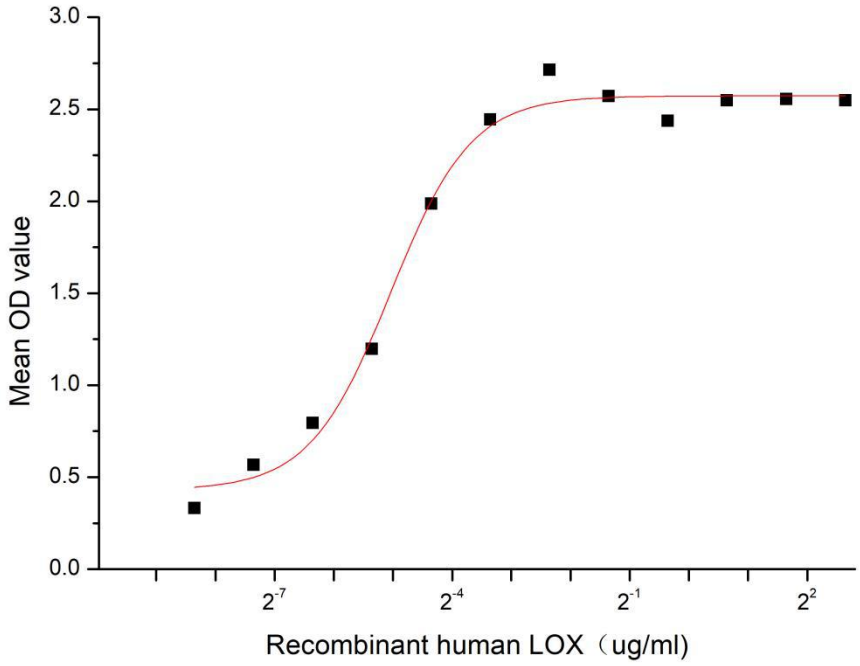

Figure 1. The binding activity of FN with LOX

[IDENTIFICATION]

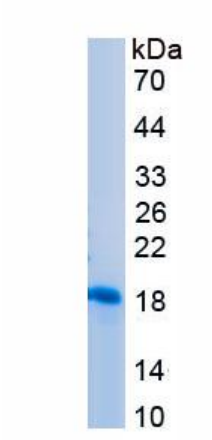

Figure 2. SDS-PAGE

Sample: Active recombinant FN, Mouse

[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.