APB860Bo01 100μg
Active Fetuin B (FETUB)
Organism Species: *Bos taurus; Bovine (Cattle)*
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: Thr19~Ser387
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% Sarcosyl, 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: 5.5
Predicted Molecular Mass: 44.5kDa
Accurate Molecular Mass: 45kDa 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]

TS PPQPAARPSS LLSLDCNSSY VLDIANDILQ
DINRDRKDGY VLSLNRVSDA REHRQEAGLG SLFYFTLDVL ETGCHVLSRT
SWKNCEVRIF HESVYGQCKA IFYINKEKRI FYLPAYNCTL RPVSQSAIIM
TCPDCPSTSP YDLSNPRFME TATESLAKYN SESPSKQYSL VKITKTSSQW
VFGPAYFVEY LIKESPCVKS EGSSCALESP GSVPVGICHG SLGEPQGNQG
KIISVTCSFF NSQAPTPRGE NATVNQRPAN PSKTEELQQQ NTAPTNSPTK
AVPKGSVQYL PDWDKKREGS QEKDPVETFP VQLDLTTNPQ GESLDVSFLF
QEPMEEKVVV LPFPSKEQRS AECPGPAQKG YPFILPS

[ACTIVITY]

Fetuin B (FETUB) is a secreted cystatin-family glycoprotein regulating extracellular matrix turnover. It functionally interacts with Collagen Type I Alpha 2 (COL1A2). Their crosstalk tunes type I collagen synthesis and fibril assembly, participating in fibrotic progression and stromal microenvironment remodeling.To detect the activity of recombinant FETUB, a functional ELISA assay was performed to evaluate the interaction between recombinant bovine FETUB and recombinant COL1A2. Briefly, COL1A2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to FETUB-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-COL1A2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 μL stop solution to the wells and read at 450/630nm immediately. Measured by its binding ability in a functional ELISA. When recombinant FETUB is Immobilized at 2 μg/mL(100 uLwell), the

concentration of COL1A2 that produces 50% optimal binding response is found to be approximately 1.308 μg/mL.

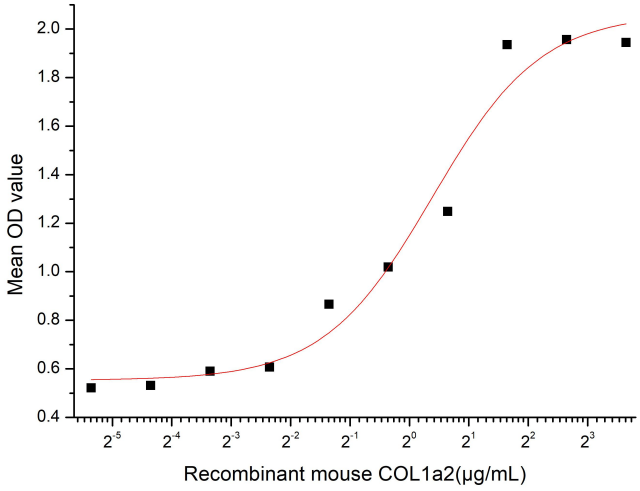


Figure 1. The binding activity of recombinant bovine FETUB and recombinant COL1A2

[IDENTIFICATION]

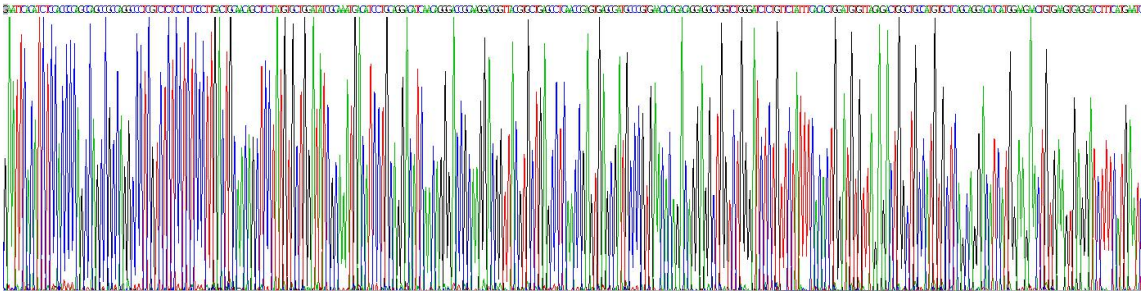


Figure 2. Gene Sequencing (extract)

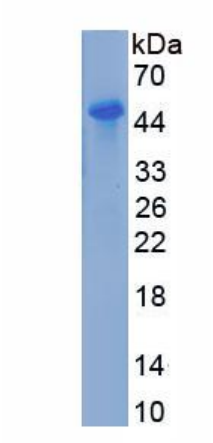


Figure 3. SDS-PAGE

Sample: Active recombinant FETUB, Cattle

[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.