APB243Hu01 50μg
Active Fatty Acid Binding Protein 3, Muscle And Heart (FABP3)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Met1~Ala133
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: 100mM $NaHCO_3$, 500mM NaCl, pH8.3, containing 0.01% sarcosyl, 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: 6.6
Predicted Molecular Mass: 16.1kDa
Accurate Molecular Mass: 16kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 100mM $NaHCO_3$, 500mM NaCl (pH8.3) 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 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]

MVDAFLGTWK LVDSKNFDDY MKSLGVGFAT RQVASMTKPT TIIEKNGDIL
TLKTHSTFKN TEISFKLGVE FDETTADDRK VKSIVTLDGG KLVHLQKWDG
QETTLVRELI DGKLILTLTH GTAVCTRTYE KEA

[ACTIVITY]

Fatty Acid Binding Protein 3, Muscle And Heart (FABP3) also known as mammary-derived growth inhibitor is a protein that in humans is encoded by the FABP3 gene. FABP3 is a small cytoplasmic protein (15kDa) released from cardiac myocytes following an ischemic episode. It is involved in active fatty acid metabolism where it transports fatty acids from the cell membrane to mitochondria for oxidation. Besides, Fatty Acid Binding Protein 3, Muscle And Heart (FABP3) has been identified as an interactor of SOD1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FABP3 and recombinant human SOD1. Briefly, FABP3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to SOD1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-FABP3 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 FABP3 and SOD1 was shown in Figure 1, and this effect was in a dose dependent manner.

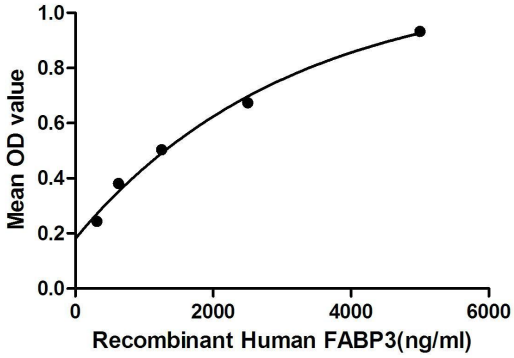

Figure 1. The binding activity of FABP3 with SOD1.

[IDENTIFICATION]

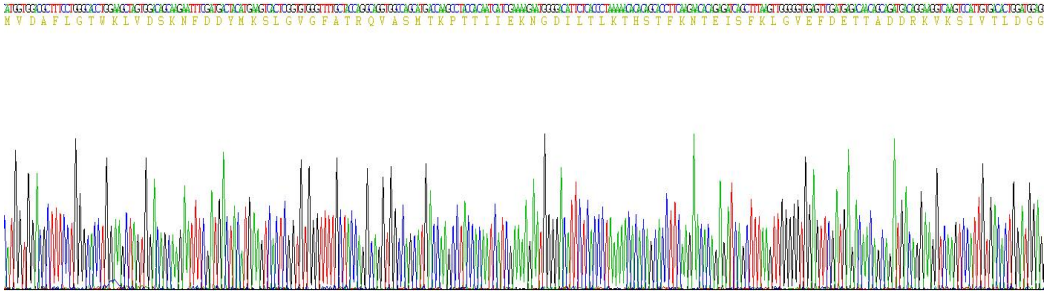

Figure 2. Gene Sequencing (extract)

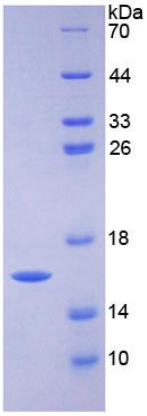

Figure 3. SDS-PAGE

Sample: Active recombinant FABP3, Human

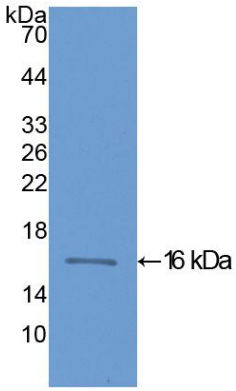

Figure 4. Western Blot

Sample: Recombinant FABP3, Human;

Antibody: Rabbit Anti-Human FABP3 Ab (PAB243Hu01)

[IMPORTANT NOTE]

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