

**APD319Hu01 100µg**

**Active Aldolase B, Fructose Bisphosphate (ALDOB)**

**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:** Ile19~Tyr364

**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:** 8.0

**Predicted Molecular Mass:** 41.1kDa

**Accurate Molecular Mass:** 41kDa 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.

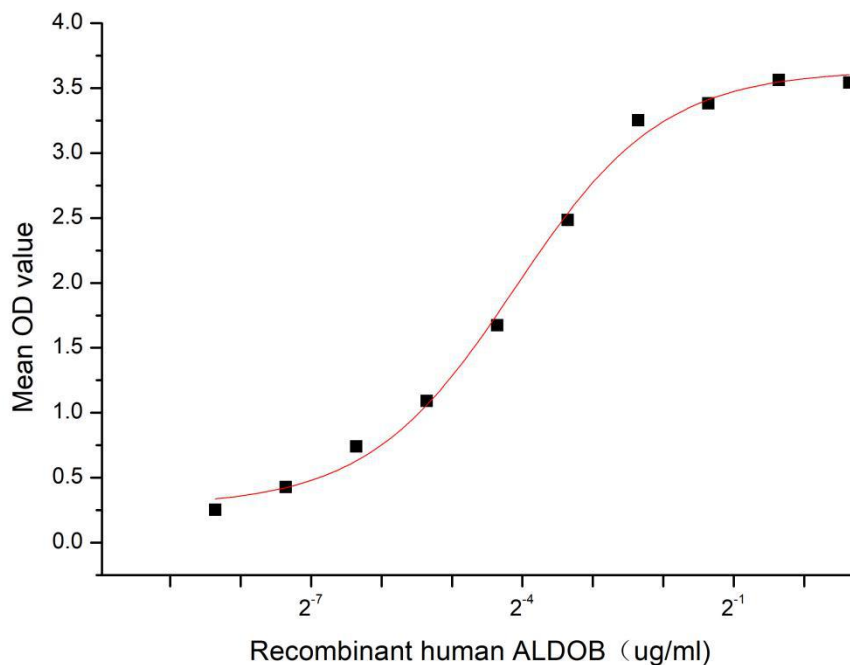
## **[ SEQUENCE ]**

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IA QSIVANGKGI LAADESVGTM GNRLQRIKVE
NTEENRRQFR EILFSVDSSI NQSIGGVILF HETLYQKDSQ GKLFRNILKE
KGIVVGIKLD QGGAPLAGTN KETTIQGLDG LSERCAQYKK DGVDGKWRRA
VLRIADQCPS SLAIQENANA LARYASICQQ NGLVPIVEPE VIPDGDHDL
HCQYVTEKVL AAVYKALNDH HVYLEGTLLK PNMVTAGHAC TKKYTPEQVA
MATVTALHRT VPAAVPGICF LSGGMSEEDA TLNLNAINLC PLPKPWKLSF
SYGRALQASA LAAWGGKAAN KEATQEA FMK RAMANCQAAK GQYVHTGSSG
AASTQSLFTA CYTY
```

## **[ ACTIVITY ]**

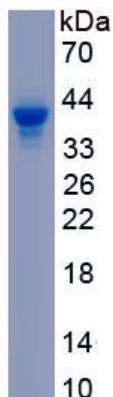
Aldolase B, Fructose-Bisphosphate (ALDOB) is a glycolytic enzyme that catalyzes the reversible cleavage of fructose-1,6-bisphosphate (F1,6BP) into glyceraldehyde-3-phosphate (GAP) and dihydroxyacetone phosphate (DHAP). Predominantly expressed in the liver, kidney, and small intestine, ALDOB plays a key role in gluconeogenesis and glycolysis. Besides, PFKP has been identified as an interactor of ALDOB, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human ALDOB and recombinant human PFKP. Briefly, ALDOB was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to PFKP-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ALDOB pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50  $\mu$ L stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human ALDOB and

recombinant human PFKP was shown in Figure 1, the EC<sub>50</sub> for this effect is 0.058ug/mL.



**Figure 1. The binding activity of recombinant human ALDOB and recombinant human PFKP**

## **[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant ALDOB, 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.