

APA053Mu01 100µg
Active Insulin Like Growth Factor Binding Protein 2 (IGFBP2)
Organism Species: *Mus musculus* (Mouse)
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: Ala34~Gln305

Tags: Two N-terminal Tags, His-tag and GST-tag

Purity: >95%

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

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 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: 6.4

Predicted Molecular Mass: 61.6kDa

Accurate Molecular Mass: 60kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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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AEVLFRC PPCTPERLAA
CGPPPDAPCA ELVREPGCGC CSVCARQEGE ACGVYIPRCA QTLRCYPNPG
SELPLKALVT GAGTCEKRRV GTTPQQVADS DDDHSEGGLV ENHVDGTMNM
LGGGSSAGRK PLKSGMKELA VFREKVNEQH RQMGKGAKHL SLEEPKKLRP
PPARTPCQQE LDQVLERIST MRLPDDRGPL EHLVSLHIPN CDKHGRYNLK
QCKMSLNGQR GECWCVNPNT GKPIQGAPTI RGDPECHLFY NEQQETGGAH
AQSVQ
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[ACTIVITY]

Insulin Like Growth Factor Binding Protein 2 (IGFBP2) is a member of IGF binding proteins (IGFBPs) family. IGF binding proteins (IGFBPs) are proteins of 24 to 45kDa. Inhibits IGF-mediated growth and developmental rates. IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs with their cell surface receptors. Besides, Insulin Like Growth Factor 2 (IGF2) has been identified as an interactor of IGFBP2, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse IGFBP2 and recombinant mouse IGF2. Briefly, IGFBP2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µL were then transferred to IGF2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IGFBP2 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

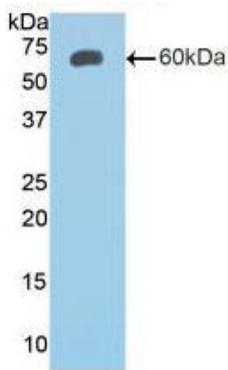


Figure 4. Western Blot

Sample: Recombinant IGFBP2, Mouse;

Antibody: Rabbit Anti-Mouse IGFBP2 Ab (PAA053Mu01)

[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.