

Active Insulin Like Growth Factor Binding Protein 2 (IGFBP2) Instruction Manual

SBPA033Mu01

Mus musculus (Mouse)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

6.4

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

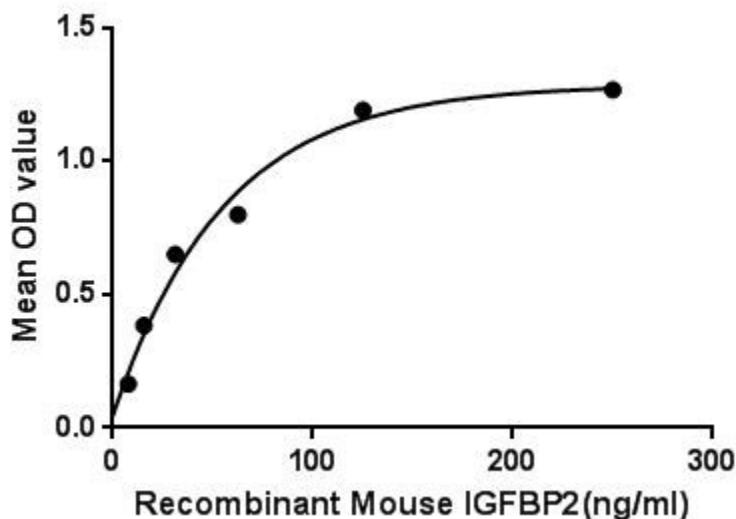


Figure. The binding activity of IGFBP2 with IGFBP2.

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 100 μ L 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 50 μ L stop solution to the wells and read at 450nm immediately. The binding activity of IGF2 and IGFBP2 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.

Image

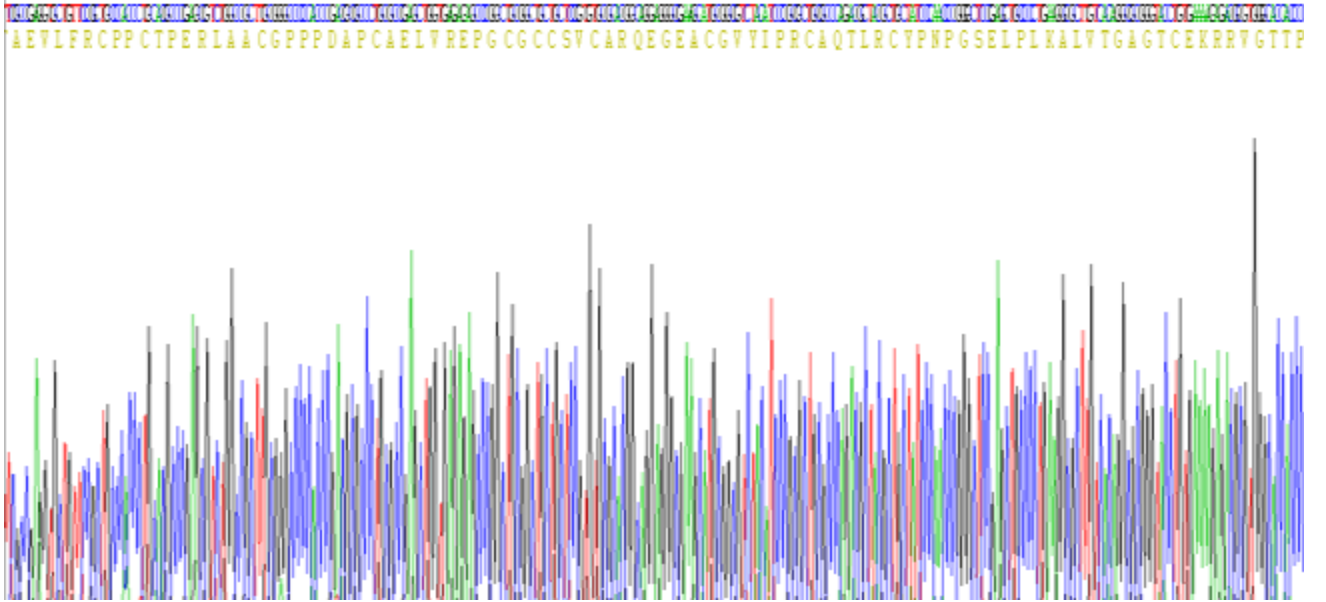


Figure. Gene Sequencing (extract)

Image

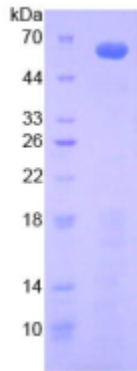


Figure. SDS-PAGE

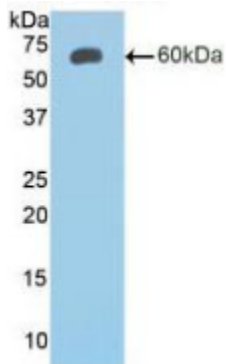


Figure. Western Blot

[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.