

Active Interferon Beta (IFN β)

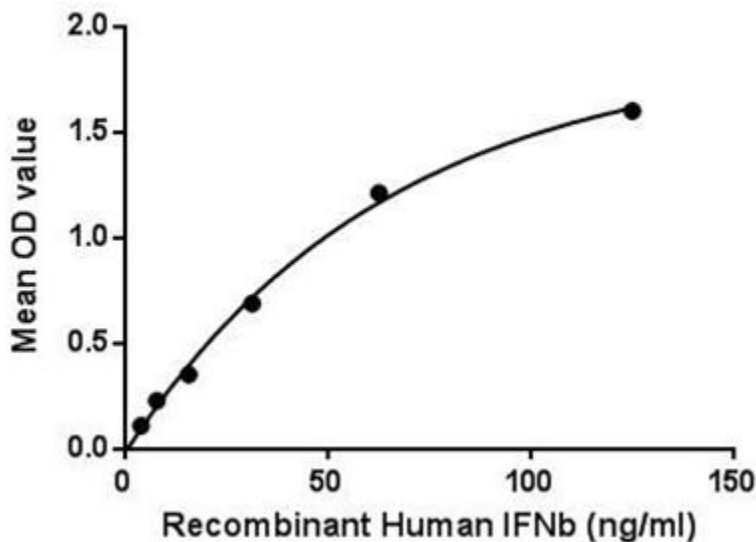
Instruction Manual

SBPA102Mu01

Mus musculus (Mouse)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 95%
Isoelectric Point	9.7
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



Interferon Beta (IFN β) belongs to type I interferons (IFNs) family which a large subgroup of interferon proteins that help regulate the activity of the immune system. The IFN β proteins are produced in large quantities by fibroblasts. They have antiviral activity that is involved mainly in innate immune response. Two types of IFN β have been described, IFN β 1 (IFNB1) and IFN β 3 (IFNB3). IFN β 1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. Besides, Interferon Alpha/Beta Receptor 1 (IFN α /bR1) has been identified as an interactor of IFN β , thus a binding ELISA assay was conducted to detect the interaction of recombinant human IFN β and recombinant human IFN α /bR1. Briefly, IFN β were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ L were then transferred to EP300-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IFN β 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 read at 450nm immediately. The binding activity of IFN β and IFN α /bR1 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 10mM PBS (pH7.4) 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

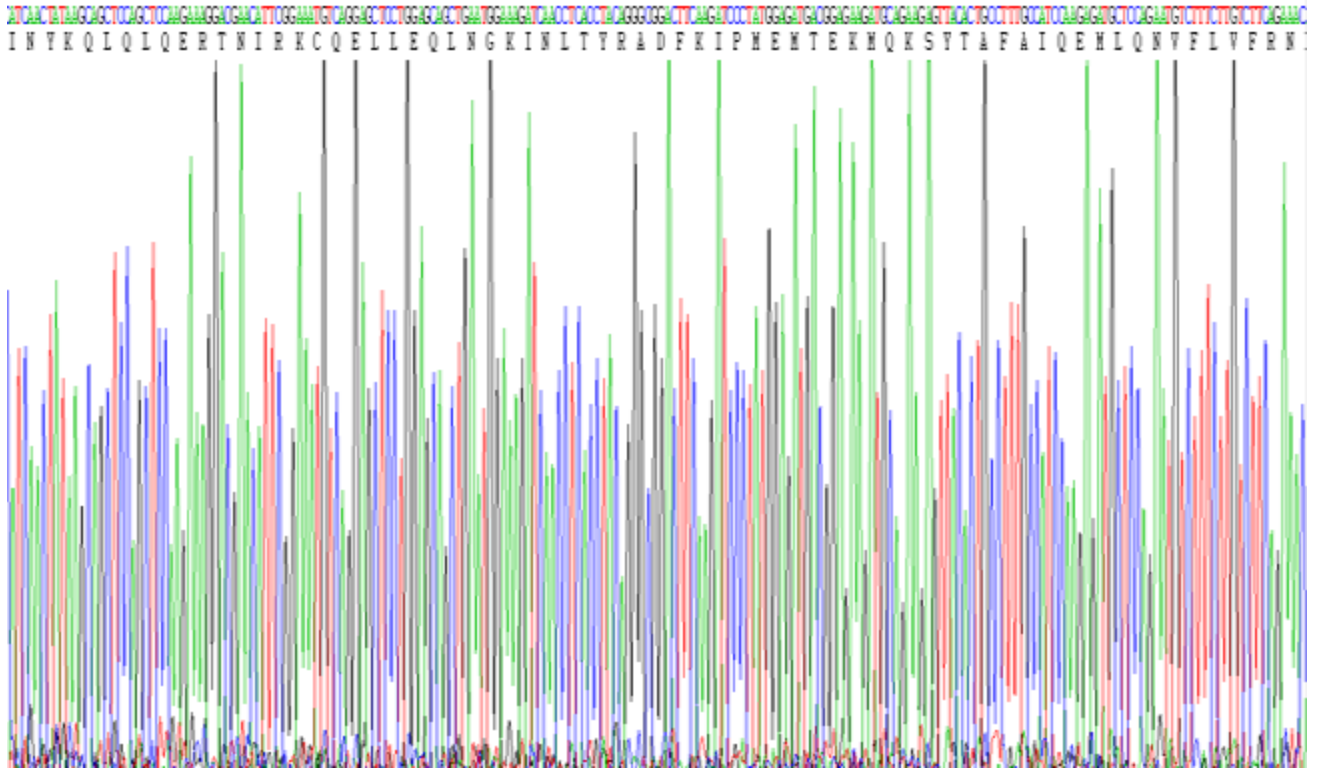


Figure. SDS-PAGE

[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.