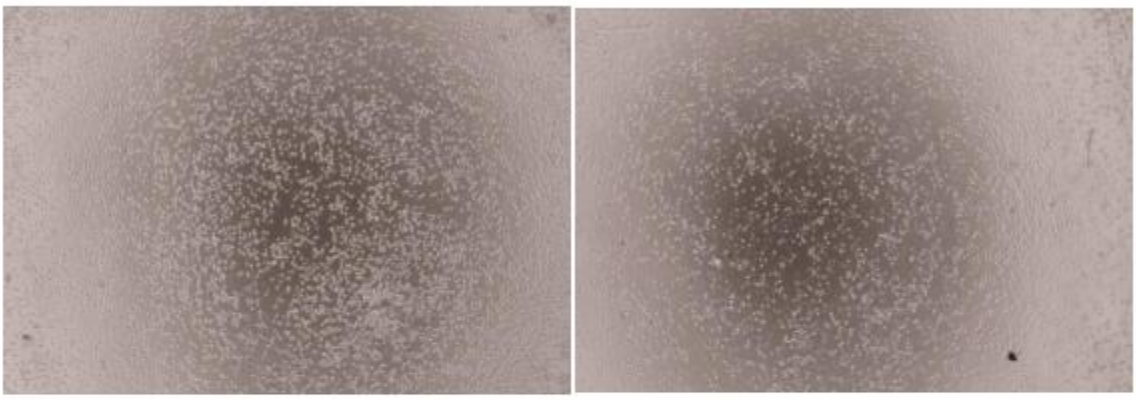
Active Interleukin 2 (IL2) Instruction Manual

SBPA047Mu61

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	4.9
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



A B

Figure 1. Cell proliferation of splenic lymphocytes cells after stimulated with IL-2.
(A) Splenic lymphocytes cells cultured in 1640, stimulated with 1ng/ml IL-2 for 72h;
(B)Unstimulated Splenic lymphocytes cells cultured in 1640 for72h.

The dose-effect curve of recombinant mouse IL-2 was shown in Figure2. It was obvious that recombinant mouse IL-2 significantly promoted cell proliferation of Splenic lymphocytes cells .The ED50 for this effect is typically 0.7-1.7ng/ml.

IL-2(Interleukin-2) is a cytokine produced by T-cells in response to antigenic or mitogenic stimulation. IL-2 is a type of signaling molecule in the immune system, that is required for both T-cell and B-cell proliferation and other activities crucial to regulation of the immune response.Therefore, in order to detect the bioactivity of recombinant mouse IL-2, spleen single suspensions were prepared, activated with conA (final concentration 3 ug/ml). Cells were collected after 72h and washed with hanks.Then

mouse splenic lymphocytes were were seeded into triplicate wells of 96-well plates at a density of 10,000 cells/well with or without the addition of various concentrations of recombinant mouse IL-2. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8(CCK-8). 10 µl of CCK-8 solution was added to each well of the plate, the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 °C . Proliferation of Splenic lymphocytes cells after incubation with IL-2 for 72h observed by inverted microscope was shown in Figure 1.

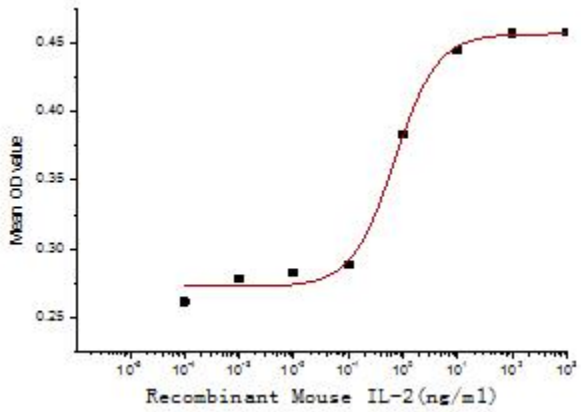


Figure 2. The dose-effect curve of IL-2 on Splenic lymphocytes cells

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

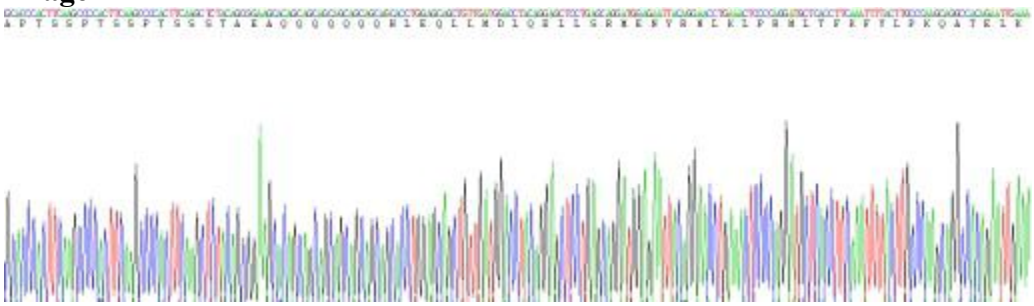
STORAGE

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



SDS-PAGE Image

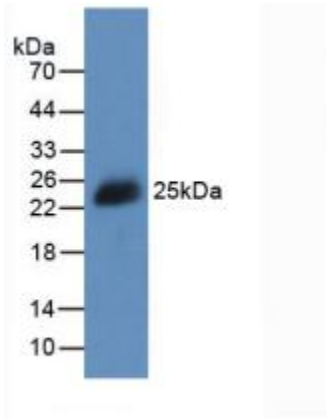


Figure. Western Blot; Sample: Recombinant IL2, Mouse.

[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.