

Active Interleukin 1 Beta (IL1b) Instruction Manual

SBPA147Hu01

Homo sapiens (Human)

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

7.1

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

Sample (cell supernatant of A549 cells)	O.D. value	Corrected	Concentration of IL-6 (ng/mL)
stimulated with IL-1 β (1ng/mL)	0.665	0.609	2.36
stimulated with IL-1 β (10ng/mL)	0.631	0.574	2.21
unstimulated	0.309	0.253	0.86

Table 1. IL-6 levels in the cell supernatant of A549 cells up-regulated by IL1- β .

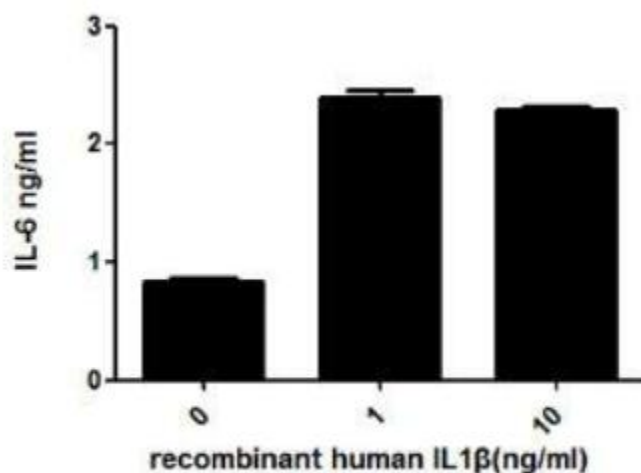


Figure 1. IL-6 levels in the cell supernatant of A549 cells up-regulated by IL1- β .

IL-1 β (Interleukin-1 beta) is a proinflammatory and immunoregulatory cytokine involved in a variety of cellular activities. It is produced by activated macrophages as a proprotein, and then proteolytically processed to an active form. It has been reported that IL-1 β -induced IL-6 production is mediated by both PI3K and IRAK4 in A549 cells. To detect the bioactivity of IL-1 β , A549 cells were seeded into 24-well plate at a density of 1x10⁵cells/mL, and allowed to attach overnight before treated with or without certain concentrations (1ng/mL, 10ng/mL) of IL1- β for 4h and IL-6 levels in the cell supernatant were determined by ELISA.

IL-6 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL1- β , the data was shown in Table 1 and Figure 1.

USAGE

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

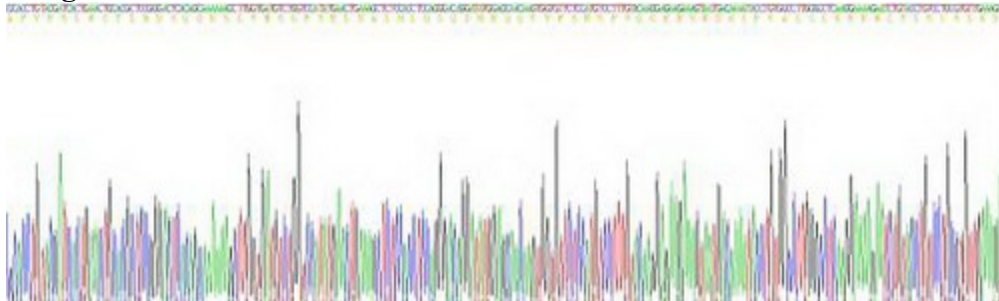
STORAGE

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

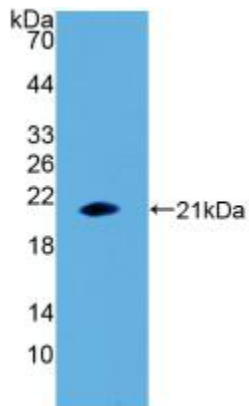


Figure. Western Blot; Sample: Recombinant IL1b, Human.

[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.