# Active Interleukin 1 Beta (IL1b) Instruction Manual

# SBPA147Eq01

Equus caballus; Equine (Horse)

<b>Buffer Formulation</b>
Traits
Purity
<b>Isoelectric Point</b>
Applications

PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Freeze-dried powder
> 90%
5.7
Cell culture; Activity Assays.

ACTIVITY TEST

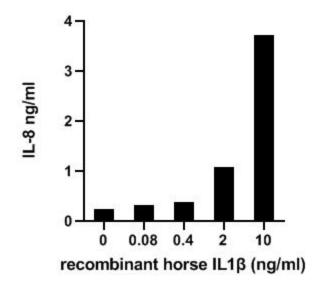


Figure 1. IL-8 levels in the cell supernatant of A549 induced by IL-1β

Interleukin 1 beta (IL-1 $\beta$ ) also known as leukocytic pyrogen, leukocytic endogenous mediator, mononuclear cell factor, lymphocyte activating factor and other names, is a member of the interleukin 1 family of cytokines. This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. It has been reported that IL-1 $\beta$  can induced IL-8 production in A549 cells. To test the bioactivity of IL-1 $\beta$ , A549 cells were seeded into 24-well plate at a density of 1x105 cells/mL, and allowed to attach overnight before treated with certain concentrations of IL-1 $\beta$  for 24h and IL-8 levels in the cell supernatant were determined by ELISA. IL-8 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL-1 $\beta$  have shown in Figure1.

#### USAGE

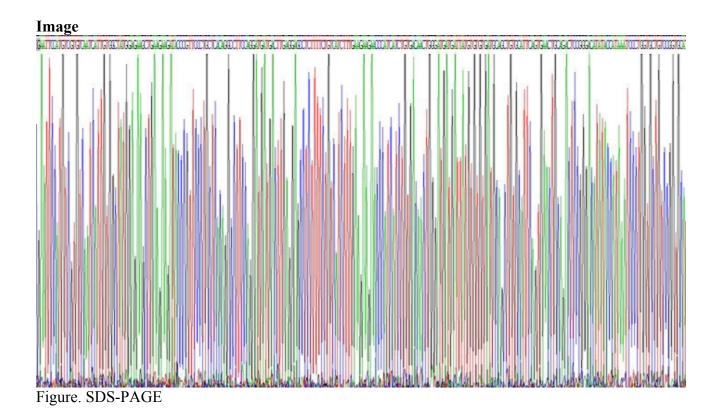
Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

#### 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.



## [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.