

Active Interleukin 10 (IL10)

Instruction Manual

SBPA035Hu61

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

> 97%

Isoelectric Point

7.6

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

Table 1. Inhibitory effects of IL-10 on IL-1 β production by THP1 cells

Sample (cell supernatant of THP1 cells)	Concentration of IL-1β (ng/m)
Stimulated with LPS (1ug/mL) and IL-10 (5ng/mL)	<2.343
Stimulated with LPS (1ug/mL) and IL-10 (10ng/mL)	<2.343
Stimulated with LPS (1ug/mL)	19.9
Unstimulated	<2.343

Interleukin 10 (IL-10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. IL-10 was initially reported to suppress cytokine secretion, antigen presentation and CD4 T cell activation. Further investigation has shown that IL-10 predominantly inhibits lipopolysaccharide (LPS) mediated induction of the pro-inflammatory cytokines TNF α , IL-1 β , IL-12, and IFN γ made by cells such as macrophages and Th1 T cells. Therefore, THP1 cells were cultured in 24 well plates at a concentration of 10⁶ cells/ml and activated by LPS (1ug/mL) in the absence or presence of IL-10 (5ng/mL, 10ng/mL) for 24h and production of IL-1 β was determined in the supernatants by cytokine specific ELISA.

Activation of THP1 cells with LPS (1ug/mL) resulted in high levels of production of IL-1 β and strong inhibitory effects of IL-10 (5ng/mL, 10ng/mL) were observed on the production of IL-1 β as shown in Table 1.

USAGE

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

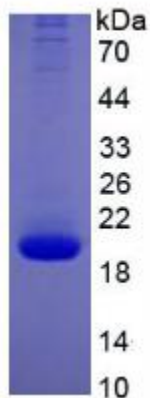
STORAGE

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

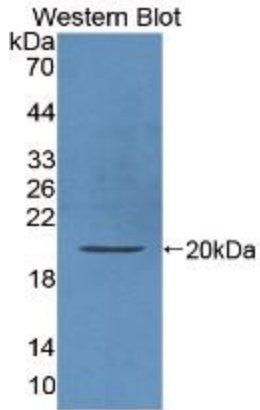


Figure. Western Blot; Sample:APA056Hu61; Antibody: PAA056Hu06

[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.