

# Active Interleukin 28B (IL28B)

## Instruction Manual

**SBPC014Hu01**

**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**

9.0

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST

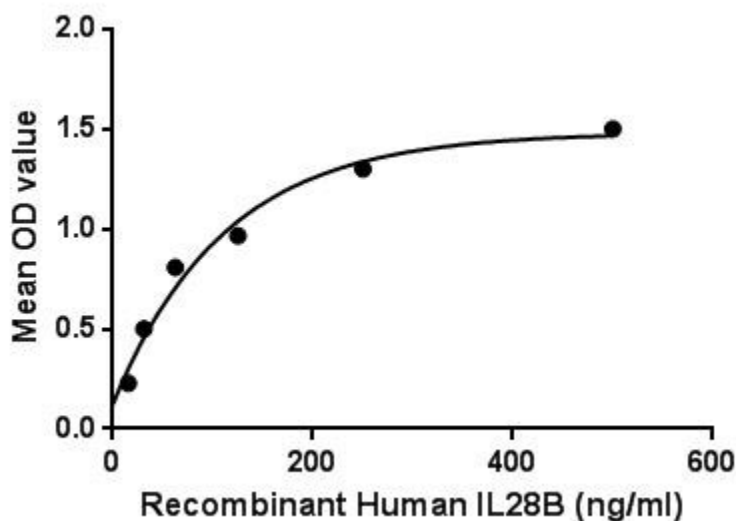


Figure. The binding activity of IL28B with IL10Rb.

Interleukin 28B (IL28B) is a cytokine distantly related to type I interferons and the IL-10 family. It has function on antiviral, antitumour and immunomodulatory activities. IL28B also plays a critical role in the antiviral host defense, predominantly in the epithelial tissues and acts as a ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IFNLR1, and receptor engagement leads to the activation of the JAK/STAT signaling pathway resulting in the expression of IFN-stimulated genes (ISG), which mediate the antiviral state. Besides, Interleukin 10 Receptor Beta (IL10Rb) has been identified as an interactor of IL28B, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL28B and recombinant human IL10Rb. Briefly, IL28B were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of

100uL were then transferred to IL10Rb-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL28B 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 IL28B and IL10Rb was shown in Figure 1, and this effect was in a dose dependent manner.

## **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**

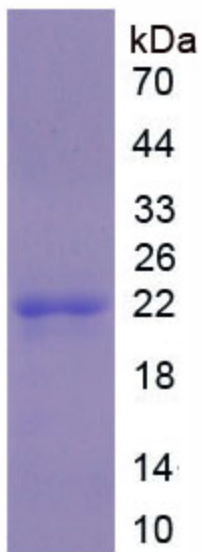


Figure. SDS-PAGE

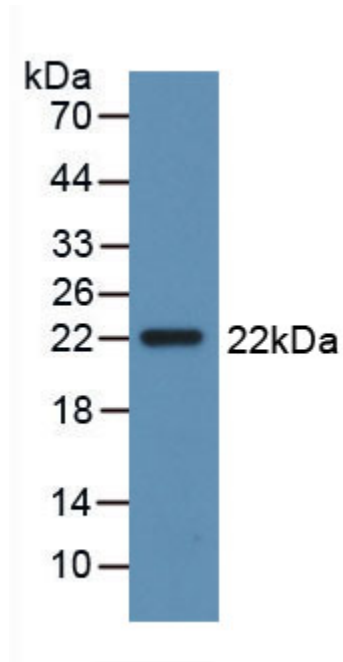


Figure. Western Blot

**[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.

