

# Active Interleukin 9 (IL9) Instruction Manual

**SBPA053Hu01**

**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%

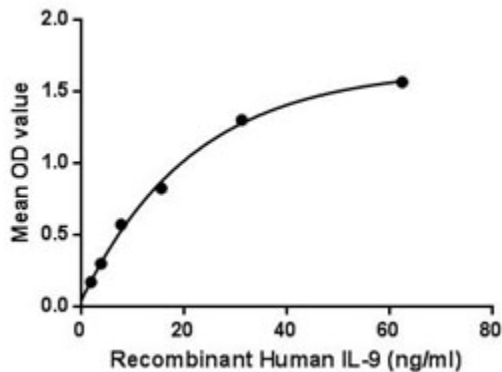
**Isoelectric Point**

9.1

**Applications**

Cell culture; Activity Assays.

**ACTIVITY TEST**



Interleukin 9, also known as IL-9, is a pleiotropic cytokine belonging to the group of interleukins. IL-9 secreted by CD4 helper cells that acts as a regulator of a variety of hematopoietic cells. This cytokine stimulates cell proliferation and prevents apoptosis. It functions through the interleukin-9 receptor (IL9R), which activates different signal transducer and activator (STAT) proteins namely STAT1, STAT3 and STAT5 and thus connects this cytokine to various biological processes. Besides, Interleukin 9 Receptor (IL9R) has been identified as an interactor of IL-9, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL-9 and recombinant human IL9R. Briefly, IL-9 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 $\mu$ L were then transferred to IL9R-coated microtiter wells and incubated for 2h at 37 $^{\circ}$ C. Wells were washed with PBST and incubated for 1h with anti-IL-9 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 $^{\circ}$ C. Finally, add 50 $\mu$ L stop solution to the wells and read at 450nm immediately. The binding activity of IL-9 and IL9R was

shown in Figure 1, and this effect was in a dose dependent manner.  
Figure. The binding activity of IL-9 with IL9R

## 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

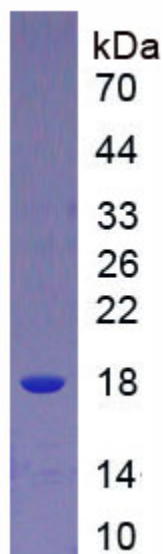


Figure. SDS-PAGE

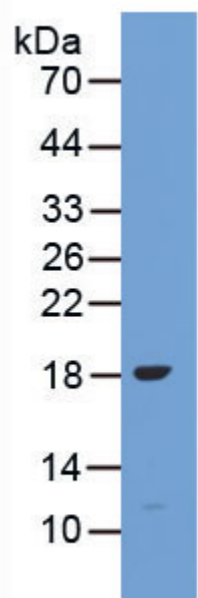


Figure. Western Blot

**[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.