

# Active Spleen Tyrosine Kinase (SYK) Instruction Manual

## SBPE350Hu01

**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**

8.4

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST

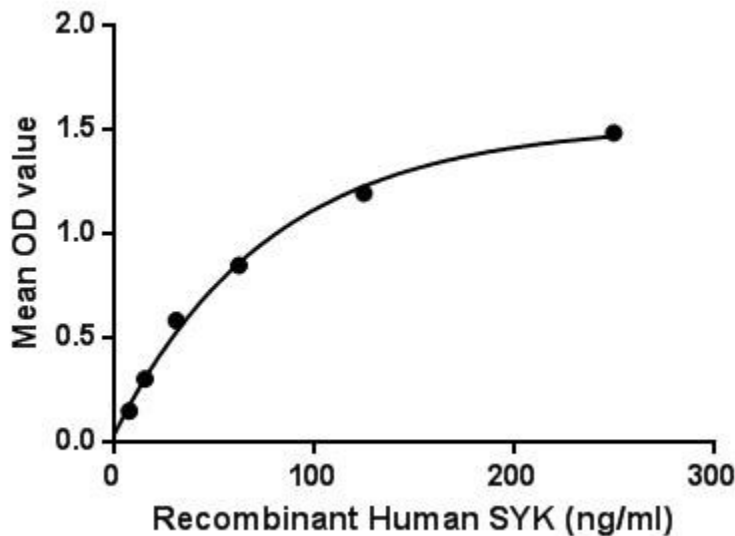


Figure. The binding activity of SYK with SIGLEC2.

Spleen Tyrosine Kinase (SYK) is a member of the SYK family of tyrosine kinases. These non-receptor cytoplasmic tyrosine kinases share a characteristic dual SH2 domain separated by a linker domain. Within B and T cells respectively, SYK and Zap-70 transmit signals from the B-Cell receptor and T-Cell receptor. SYK plays a similar role in transmitting signals from a variety of cell surface receptors including CD74, Fc Receptor, and integrins. Besides, Sialic Acid Binding Ig Like Lectin 1 (SIGLEC2) has been identified as an interactor of SYK, thus a binding ELISA assay was conducted to detect the interaction of recombinant human SYK and recombinant human SIGLEC2. Briefly, SYK were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of

100 $\mu$ L were then transferred to SIGLEC2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SYK 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 50 $\mu$ L stop solution to the wells and read at 450nm immediately. The binding activity of SYK and SIGLEC2 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**

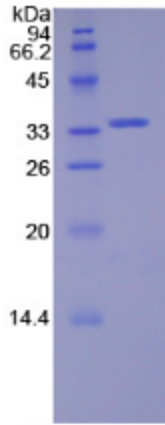


Figure. SDS-PAGE

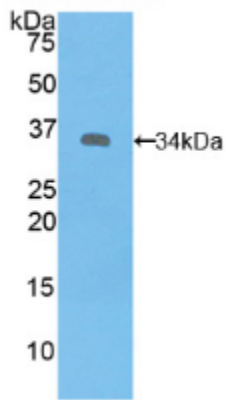


Figure. Western Blot

**[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.