

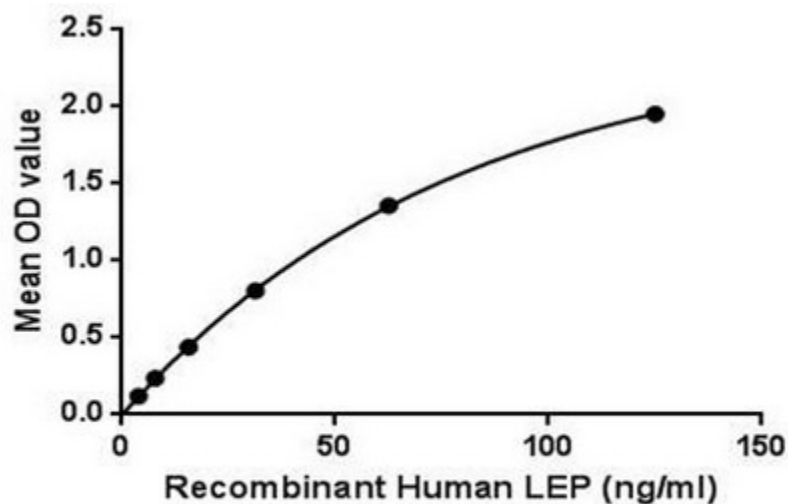
# Active Leptin (LEP) Instruction Manual

## SBPA055Hu01

**Homo sapiens (Human)**

<b>Buffer Formulation</b>	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
<b>Traits</b>	Freeze-dried powder
<b>Purity</b>	> 90%
<b>Isoelectric Point</b>	5.7
<b>Applications</b>	Cell culture; Activity Assays.

### ACTIVITY TEST



**Figure 1. The binding activity of LEP with HK3.**

Leptin is a hormone made by adipose cells that helps to regulate energy balance by inhibiting hunger. Many of leptin's effects are mediated through neuropeptide-containing neurons and neuropeptide receptors in the hypothalamus. Although regulation of fat stores is deemed to be the primary function of leptin, it also plays a role in other physiological processes, as evidenced by its multiple sites of synthesis other than fat cells, and the multiple cell types beside hypothalamic cells that have leptin receptors. Besides, Hexokinase 3, White Cell (HK3) has been identified as an interactor of LEP, thus a binding ELISA assay was conducted to detect the interaction of recombinant human LEP and recombinant human HK3. Briefly, LEP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to HK3-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and

incubated for 1h with anti-LEPpAb, 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 LEP and HK3 was shown in Figure 1, and this effect was in a dose dependent manner.

## 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.

## Image

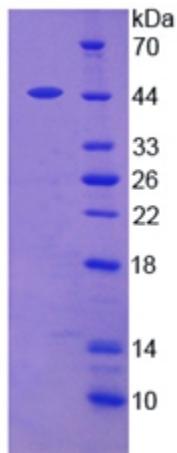


Figure. SDS-PAGE

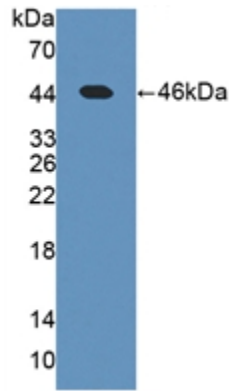


Figure. Western Blot; Sample: Recombinant LEP, Human.

**[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.