

Active Heparin (Hepc) Instruction Manual

SBPB287Hu61

Homo sapiens (Human)

Buffer Formulation

PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

9.4

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

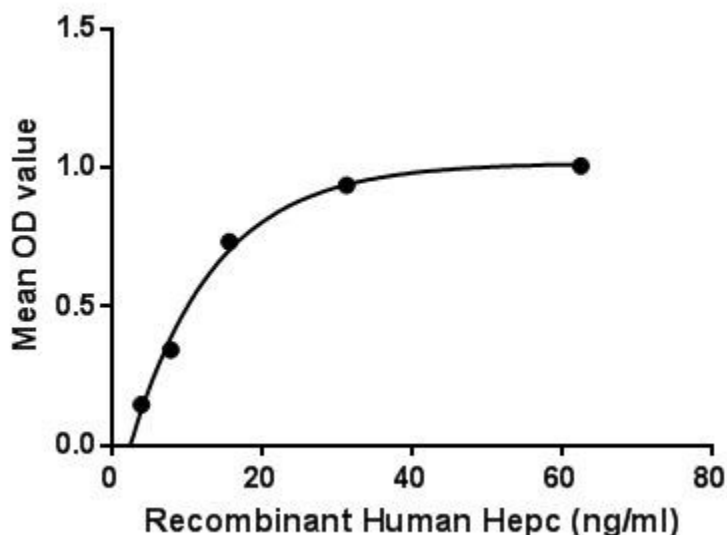


Figure. The binding activity of Hepc with FPN.

Heparin (Hepc) is a regulator of iron metabolism. Heparin inhibits iron transport by binding to the iron export channel ferroportin which is located on the basolateral surface of gut enterocytes and the plasma membrane of reticuloendothelial cells (macrophages). Heparin ultimately breaks down the transporter protein in the lysosome. Inhibiting ferroportin prevents iron from being exported and the iron is sequestered in the cells. Besides, Ferroportin (FPN) has been identified as an interactor of Hepc, thus a binding ELISA assay was conducted to detect the interaction of recombinant human Hepc and recombinant human FPN. Briefly, Hepc were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ L were then transferred to FPN-coated microtiter

wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-Hepc 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 Hepc and FPN was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 10mM PBS (pH7.6) 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

TCGTTTTCACACAGACGGGACACCTGCAGAGCTCAACCCAGGACAGACTGGACCAAGGACCTGGATCCCAAGTTCCAGGCGAAGGACGCGAGACACCACTTCCCACTCCATTTCTCTCCGCTGCTGTCATGATCAAGTGTGGAGTCTCCAGACCTTGAGGCAAACTAC
S V F P Q Q T G Q L A E L Q P Q D R A G A R A S V M P M F Q R R R R R D T H F P I C I F C C G C C H R S K C G M C C K T L E D K T H '

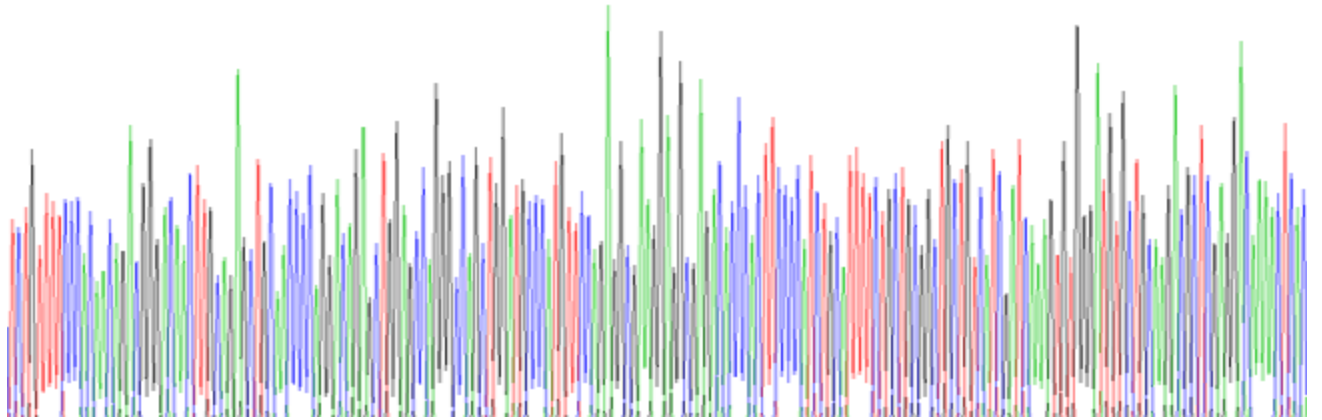


Figure. Gene Sequencing (Extract)

Image

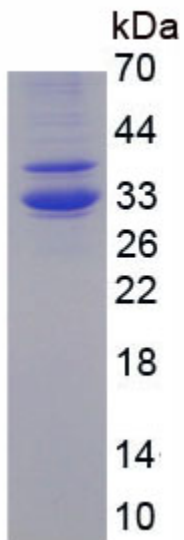


Figure. SDS-PAGE

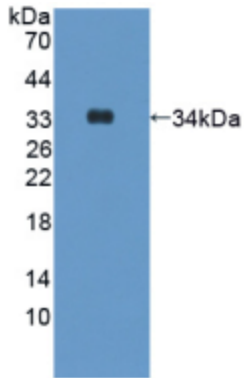


Figure. Western Blot

[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.