Active Plasminogen (Plg) Instruction Manual

SBPB215Hu51

Homo sapiens (Human)

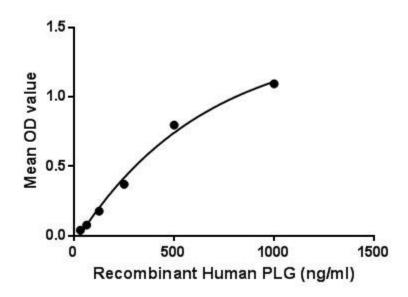
Buffer Formulation PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Traits Freeze-dried powder

Purity > 95% Isoelectric Point 8.0

Applications Cell culture; Activity Assays.

ACTIVITY TEST



Plasminogen (PLG) as a zymogen releases plasmin from the liver into the systemic circulation. Plasmin is a serine protease that acts to dissolve fibrin blood clots. Apart from fibrinolysis, plasmin proteolyses proteins in various other systems: It activates collagenases, some mediators of the complement system and weakens the wall of the Graafian follicle (leading to ovulation). It cleaves fibrin, fibronectin, thrombospondin, laminin, and von Willebrand factor. Plasmin, like trypsin, belongs to the family of serine proteases. Besides, Insulin Like Growth Factor Binding Protein 3 (IGFBP3) has been identified as an interactor of PLG, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PLG and recombinant human IGFBP3. Briefly, PLG were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IGFBP3-coated microtiter wells and incubated for 2h at

37°C. Wells were washed with PBST and incubated for 1h with anti-PLG 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 PLG and IGFBP3 was shown in Figure 1, and this effect was in a dose dependent manner.

Figure. The binding activity of PLG with IGFBP3

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

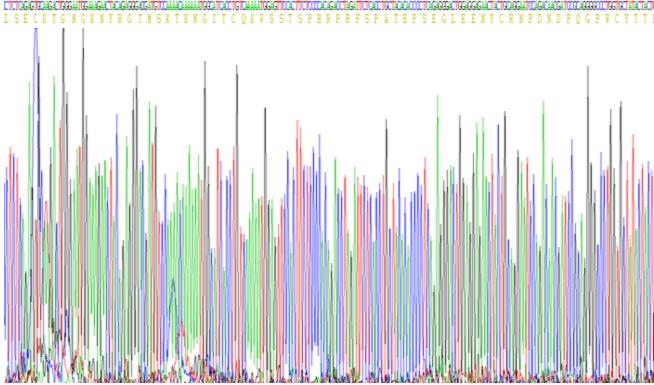
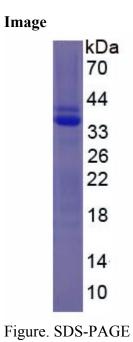


Figure. Gene Sequencing (Extract)



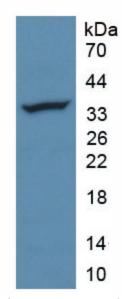


Figure. Western Blot

[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.