Recombinant Hirudin

H649019

Storage： Store at -20℃ for 2 years

Introduction:

Recombinant Hirudin is a potent thrombin inhibitor originally derived from the medicinal leech. Hirudin acts directly on thrombin rather than through other clotting factors. The mechanism of Hirudin-thrombin appears to be unique. The conversion of fibrinogen into fibrin by the serine protease enzyme thrombin is a major event in the final stages of blood coagulation. In the final stages of coagulation prothrombinase converts prothrombin into thrombin. Fibrin is subsequently cross linked by factor XIII to form a blood clot. The primary inhibitor of thrombin in normal blood circulation is antithrombin III. The anticoagulant activity of hirudin is derived from its ability to inhibit the pro-coagulant activity of thrombin (similar to antithrombin III activity). Hirudin is the strongest natural inhibitor of thrombin. Hirudin binds to and inhibits only the activity of thrombin forms with a specific activity on fibrinogen contrasting to antithrombin III activity. Therefore, hirudin has a thrombolytic activity since it prevents or dissolves the formation of clots and thrombi. Hirudin also has therapeutic significance in blood coagulation disorders, in the treatment of skin hematomas and of superficial varicose veins. Hirudin does not hinder with the biological activity of other serum proteins and can also act on complexed thrombin, thus having an advantage over more common anticoagulants and thrombolytics.

Usage method:

After receiving the product, please store it immediately according to the conditions recommended in the instruction manual. All products are lyophilized powders. Due to the deposition of trace amounts of protein in the tube during the lyophilization process, a very thin or invisible protein layer is formed. Therefore, before opening the tube cap, we recommend centrifuging it at approximately 8,000-12,000g for 10-30 seconds in a centrifuge to gather the protein adhering to the tube cap or the tube wall at the bottom of the tube.

Please prepare the stock solution according to the experimental purpose and the information in the "Reconstitution Conditions" section of the product introduction. The lyophilized powders of most cytokines or recombinant proteins are very easy to dissolve. Generally, gently pipetting with the tip of a pipette a few times or gently shaking the bottle can completely dissolve the cytokine or recombinant protein. Do not vigorously shake it with a vortex mixer to avoid protein denaturation and inactivation.

Precautions:

1. Since the walls of some plastic tubes have a strong adsorption effect on certain proteins, the proteins in the solution are likely to adhere to the tube walls, and it is difficult to separate the adhered proteins from the tube walls. The main function of the carrier

protein (such as 0.1% BSA, etc.) is to pre-block the protein binding sites on the plastic tube walls, so that the cytokines or recombinant proteins will not adhere to the tube walls. Therefore, it is necessary to prepare the stock solution using the information in the "Reconstitution Conditions" section of the product introduction.

2. This product is only for scientific research by professionals and shall not be used for clinical diagnosis or treatment, nor for food or pharmaceuticals, and shall not be stored in ordinary residential houses.
3. For your safety and health, please wear a laboratory coat and disposable gloves when operating. For the experiment, the concentration of SDS should not exceed 0.02 -0.04%.