

Recombinant Hirudin

Catalog No.	CRH117A	Quantity:	2 µg
	CRH117B		10 µg
	CRH117C		1 mg

Description: Hirudin is a potent thrombin-specific protease inhibitor originally derived from a medicinal leech, *Hirudo medicinalis*. Unlike heparin, hirudin acts directly on thrombin, and complexed thrombin, rather than through other clotting factors. It has a high binding affinity and specificity for thrombin. Hirudin is the strongest natural inhibitor of thrombin. Therefore, hirudin prevents or dissolves the formation of clots and thrombin. It has a therapeutic value in blood coagulation disorders, with an advantage over more common anticoagulants and thrombolytics.

Recombinant Hirudin is derived from yeast and is identical to natural Hirudin except for the substitution of leucine for isoleucine at the N-terminal end of the molecule and the absence of a sulfate group on the tyrosine at position 63.

UniProt ID: P01050

Source: Expressed in *Pichia pastoris*

Molecular Weight: 6.9 kDa (65 aa) monomer

Formulation: Lyophilized from sterile filter 20 mM PBS, pH 7.0 containing 2% mannitol.

Purity: > 98% by SDS-PAGE and HPLC

Endotoxin Level: <1 EU/mg

Biological Activity: The biological activity is measured by chromogenic assay. 1 unit is defined as the amount of Hirudin that neutralizes 1 unit of the WHO preparation 89/588 of thrombin.

Specific Activity: ≥14,000 ATU/mg protein.

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Further dilution should be made in appropriate buffered solutions.

Storage & Stability: Store at -20°C to -80 °C for up to one year. Upon reconstitution, product is stable at 2-8°C for 2-7 days. For longer term, store in working aliquots containing 0.1% BSA at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

