



## Technical Data Sheet

### Recombinant Hirudin

#### *Hirudin*

Hirudin is a potent thrombin inhibitor originally derived from the medicinal leech. Unlike heparin, hirudin acts directly on thrombin, rather than through other clotting factors. They have a high binding affinity and specificity for thrombin. The mechanism of hirudin-thrombin binding appears to be unique. Recombinant hirudin variant is derived from yeast cell, the polypeptide containing 65 amino acid residues has a molecular weight of 6979.5 Da, which is identical to natural hirudin except for 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.

<b>Catalog Number:</b>	RC772-12
<b>Source:</b>	<i>Saccharomyces cerevisiae</i>
<b>Molecular Weight:</b>	6979.5 Da, containing 65 amino acid residues.
<b>Quantity:</b>	2 $\mu$ g/10 $\mu$ g/500 $\mu$ g
<b>Purity:</b>	>96% by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	rHirudin is fully biologically active when compared to standard. Its specific activity is $\geq 1 \times 10^4$ ATU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PBS, pH 7.0, containing 2% mannitol.
<b>Endotoxin:</b>	Less than 10EU/mg of rHirudin as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
<b>Storage:</b>	This lyophilized preparation is stable at 2-8 $^\circ\text{C}$ , but should be kept at -20 $^\circ\text{C}$ for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^\circ\text{C}$ . For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 $^\circ\text{C}$ to -70 $^\circ\text{C}$ . <b>Avoid repeated freeze/thaw cycles.</b>
<b>Usage:</b>	This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>