

*Specifications and Use*

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| Source | <ul style="list-style-type: none">● <i>Pichia. Pastoris</i> expression of a DNA sequence encoding the mature hirudin variant (Leu1, Thr2-63-desulfohirudin) |
| Molecular Mass | <ul style="list-style-type: none">● 7kDa |
| Purity | <ul style="list-style-type: none">● $\geq 98\%$ as determined by SDS-PAGE and HPLC analyses. |
| Biological Activity | <ul style="list-style-type: none">● rHirudin is fully biologically active when compared to standards. Its specific activity is $\geq 1 \times 10^4$ ATU/mg. |
| Endotoxin Level | <ul style="list-style-type: none">● Less than 10EU/mg of rHirudin as determined by LAL method. |
| Formulation | <ul style="list-style-type: none">● Sterile filtered lyophilized (freeze-dried) powder |
| Solubility | <ul style="list-style-type: none">● It is recommended to reconstitute the lyophilized rHirudin in sterile distilled H₂O to prepare a stock solution of no less than 100 μg/ml of the cytokine. |
| Stability | <ul style="list-style-type: none">● The lyophilized rHirudin powder, though stable at room temperature, is best kept desiccated below 0°C.● Reconstituted rHirudin aliquots should be stored at -20°C for maximal stability up to six months.● Avoid repeated freeze-thaw cycles. |
| Usage | <ul style="list-style-type: none">● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE. |

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 7kDa, 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.