

Recombinant Hirudo Hirudin protein

Cat. No. Hirudin-02 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Hirudo Hirudin protein was expressed in Pichia Pastoris.
Species	Hirudo
Source	P.pastoris
ProteinLength	63
Description	Hirudin is the most potent natural thrombin-specific protease inhibitor, and is originally derived in the salivary glands of the medicinal leech. Unlike heparin, hirudin act directly on thrombin, rather than through other clotting factors. They have a high binding affinity and specificity for thrombin. Therefore, hirudin prevents or dissolves the formation of clots and thrombi, and has therapeutic value in blood coagulation disorders, in the treatment of skin hematomas and of superficial varicose veins, either as an injectable or a topical application cream.
Form	Lyophilized from a 0.2µm filtered solution of 20 mM PBS, pH 7.0, containing 2 % mannitol.
Bio-activity	The biological activity is determined by chromogenic assay, 1 unit is defined as the amount of Hirudin that neutralizes 1 unit of the WHO preparation 89/588 of thrombin. The specific activity is no less than 14,000 ATU/mg protein.
Molecular Mass	Approximately 6.7 kDa, a single non-glycosylated polypeptide chain containing 63 amino acid residues.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence	VVYTDCTESGQNLCLCEGSNVCGQGKNCILGSDGEKNQCVTGEGTPGPQSHNDG DFEPEEYL
Endotoxin	Less than 1 EU/μg of rHirudin as determined by LAL method.
Purity	>96% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	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 ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.
GENE INFORMATION	
UniProt ID	P84590