

Recombinant Hirudin (rHirudin)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

661-01

Source:

Pichia Pastoris

Molecular Weight:

Approximately 6.7 kDa, a single non-glycosylated polypeptide chain containing 63 amino acid

residues.

Quantity:

 $2 \mu g / 10 \mu g / 1000 \mu g$

AA Sequence:

VVYTDCTESG QNLCLCEGSN VCGQGNKCIL GSDGEKNQCV TGEGTPGPQS

HNDGDFEEPE EYL

Purity:

> 96 % by SDS-PAGE and HPLC analyses.

Biological 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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 μm filtered solution of 20 mM PBS, pH 7.0, containing 2 % mannitol.

Endotoxin:

Less than 1 EU/µg of rHirudin as determined by LAL method.

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 \leq -20 $\mathbb C$. Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature

recommended below.

Stability & Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

12 months from date of receipt, -20 to -70 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Hirudin

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.

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