PRODUCT INFORMATION



Hirudin (54-65; non-sulfated) (trifluoroacetate salt)

Item No. 33716

Formal Name: glycyl-L-α-aspartyl-L-phenylalanyl-L-

> α -glutamyl-L- α -glutamyl-L-isoleucyl-L-prolyl-L-α-glutamyl-L-α-glutamyl-L-tyrosyl-L-leucyl-L-glutamine,

trifluoroacetate salt

H-GDFEEIPEEYLQ-OH, H-Gly-Asp-Synonyms:

Phe-Glu-Glu-Ile-Pro-Glu-Glu-Tyr-

Leu-Gln-OH

MF: $C_{66}H_{93}N_{13}O_{25} \bullet XCF_3COOH$

FW: 1,468.5 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Hirudin (54-65; non-sulfated) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the hirudin (54-65; non-sulfated) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Hirudin (54-65; non-sulfated) (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of hirudin (54-65; non-sulfated) (trifluoroacetate salt) in these solvents is approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of hirudin (54-65; non-sulfated) (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of hirudin (54-65; non-sulfated) (trifluoroacetate salt) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Hirudin (54-65; non-sulfated) is a desulfated peptide fragment of hirudin, an anticoagulant produced by H. medicinalis. It inhibits fibrin clot formation induced by isolated bovine thrombin with an IC₅₀ value of $3.7 \mu M.^{2}$

References

- 1. Niehrs, C., Huttner, W.B., Carvallo, D., et al. Conversion of recombinant hirudin to the natural form by in vitro tyrosine sulfation. Differential substrate specificities of leech and bovine tyrosylprotein sulfotransferases. J. Biol. Chem. 265(16), 9314-9318 (1990).
- 2. Payne, M.H., Krstenansky, J.L., Yates, M.T., et al. Positional effects of sulfation in hirudin and hirudin PA related anticoagulant peptides. J. Med. Chem. 34(3), 1184-1187 (1991).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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