

# Screening Libraries

**Proteins** 

# MCE MedChemExpress

## **Product** Data Sheet

# Hirudin Protein, Poecilobdella viridis (P. pastoris)

Cat. No.: HY-P72799

Synonyms: Hirudin

Species: Others

Source: P. pastoris

Accession: P84590 (V1-L63)

Gene ID: /

Molecular Weight: Approximately 6.7 kDa

#### **PROPERTIES**

AA Sequence	VVYTDCTESG QNLCLCEGSN VCGQGNKCIL GSDGEKNQCV TGEGTPGPQS HNDGDFEEPE EYL
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.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PBS, pH 7.0, containing 2 % mannitol.
Endotoxin Level	<1 EU/μg; determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH $_2$ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### **DESCRIPTION**

Background

Hirudin Protein emerges as a potent thrombin-specific protease inhibitor, showcasing its ability to form a stable non-covalent complex with alpha-thrombin. This interaction results in the effective abolition of alpha-thrombin's capacity to cleave fibrinogen, underscoring the critical role of hirudin in modulating key steps in the coagulation cascade. The specific and targeted inhibition of thrombin by hirudin highlights its significance as a therapeutic agent, particularly in contexts where precise regulation of blood clotting is essential.

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 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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