

## 32-3338: Bivalirudin

### Description

The active of Bivalirudin substance is a synthetic 20 amino acid peptide. The amino acid sequence is Phe-Pro-Arg-Pro-Gly-Gly-Gly-Gly- Asn-Gly-Asp-Phe-Glu-Glu-Ile- Pro-Glu-Glu-Tyr-Leu. The Mw is 2180 dalton. Bivalirudin directly inhibits thrombin by specifically binding as well to the catalytic site and to the anion-binding exosite of circulating and clot-bound thrombin. Bivalirudin is a specific and reversible direct thrombin inhibitor. Thrombin, which is a serine protease, plays a central role in the thrombotic process; it cleaves fibrinogen into fibrin monomers and activates Factor XIII to Factor XIIIa, allowing fibrin to develop a covalently cross-linked structure which stabilizes the thrombus. Thrombin also activates Factors V and VIII, which promotes further thrombin generation, activates platelets, stimulating aggregation and granule release.

### Product Info

<b>Amount :</b>	5 mg
<b>Purification :</b>	Greater than 98.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	The protein (1mg/ml) was lyophilized with 0.5mg Manntiol and sodium hydroxide 50µg pH-5.5.
<b>Storage condition :</b>	Lyophilized Bivalirudin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Bivalirudin should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

### Application Note

It is recommended to reconstitute the lyophilized Bivalirudin in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

