

Bivalirudin - Purified

Catalog No.: AR10368PU-L

Quantity: 0.1 g

Concentration: 1 mg/ml

Background: 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.

Source: Synthetic

Format: **State:** Sterile Filtered White lyophilized (freeze-dried) powder.

Purity: > 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Buffer System: Lyophilized with 0.5mg Mannitol and Sodium Hydroxide 50µg, pH-5.5

Reconstitution: It is recommended to restore the lyophilized Bivalirudin in sterile 18MΩ-cm⁻¹ H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Description: The active of Bivalirudin substance is a Synthetic 20 amino acid peptide.

AA Sequence:

Phe-Pro-Arg-Pro-Gly-Gly-Gly-Gly- Asp-Gly-Asp-Phe-Glu-Glu-Ile- Pro-Glu-Glu-Tyr-Leu.

Molecular weight: 2180 dalton

Storage: Lyophilized Bivalirudin although stable at RT for 3 weeks, should be stored desiccated below -18°C.

Upon reconstitution Bivalirudin should be stored at 2-8°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.