

Synthetic Human Bivalirudin

Catalog No.	CRB505A	Quantity:	1.0 mg
	CRB505B		5 mg
	CRB505C		100 mg

Description: 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.

Human Bivalirudin is a synthetic 20 amino acid peptide.

Concentration: 1 mg/ml

Molecular Weight: 2.18 kDa

Formulation: Lyophilized with 0.5 mg Mannitol + 50 µg sodium hydroxide, pH 5.5.

Purity: >98.0% as determined by analysis by RP-HPLC and SDS-PAGE.

Endotoxin Level: Less than 0.1 ng/µg (1 EU/µg) of the protein.

Amino Acid Sequence: Phe-Pro-Arg-Pro-Gly-Gly-Gly-Gly-Asp-Gly-Asp-Phe-Glu-Glu-Ile- Pro-Glu-Glu-Tyr-Leu.

Reconstitution: **Centrifuge vial prior to opening.** First add sterile water to the vial to fully solubilize the protein to a concentration not less than 100 µg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.

Storage & Stability: Lyophilized samples are stable at room temperature for 3 weeks, but it is recommended to store them desiccated at -20°C to -80°C. Upon reconstitution, protein may be stored at 2-4°C for one week and for six months at -20°C to -80°C. Add a carrier protein (0.1% HSA or BSA) as a stabilizer for long term storage. **Avoid repeated freeze-thaw cycles.**

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