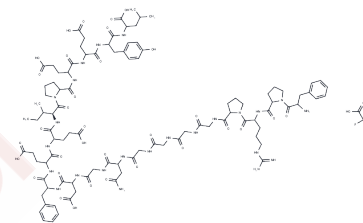


## Bivalirudin TFA

## Chemical Properties

CAS No. :	1191386-55-6
Formula:	C <sub>98</sub> H <sub>138</sub> N <sub>24</sub> O <sub>33</sub> .C <sub>2</sub> H <sub>4</sub> F <sub>3</sub> O <sub>2</sub>
Molecular Weight:	2294.34
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Bivalirudin TFA, a synthetic 20-residue peptide, serves as a reversible inhibitor of thrombin. Its IC <sub>50</sub> value highlights its target specificity in vitro, where, combined with Eptifibatide (8 mg/mL) at a low concentration (70 ng/mL), it significantly reduces platelet aggregation induced by thrombin (0.2 U/mL) by approximately 90% [1]. The compound demonstrates no effect on thrombin generation assay (TGA) parameters up to 10 µmol/L [2]. Additionally, it facilitates the binding of MPO to BAEC, leading to functional alterations such as increased NO consumption and enhanced MPO-mediated redox modifications [3]. In vivo studies reveal its efficacy in preventing the rise of antiheparin/PF4 antibody IgG levels in rats, with significant findings from the toxicokinetic assessment signaling its safety profile at tested doses, although higher doses resulted in fatalities [4][5]. In clinical trials, its antithrombotic effects were explored, comparing it with alternatives like Ticagrelor and Clopidogrel in a Phase 4 study.
Targets(IC <sub>50</sub> )	Interleukin,RSV,Thrombin

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4359 mL	2.1793 mL	4.3586 mL
5 mM	0.0872 mL	0.4359 mL	0.8717 mL
10 mM	0.0436 mL	0.2179 mL	0.4359 mL
50 mM	0.0087 mL	0.0436 mL	0.0872 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481