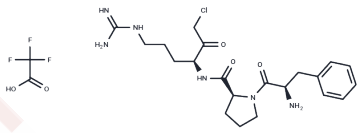
Data Sheet (Cat.No.T25977)

TargetMol

Ppack trifluoroacetate

Chemical Properties



CAS No. : 157379-44-7

Formula: C23H32ClF3N6O5

Molecular Weight: 564.99

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ppack trifluoroacetate is a peptide derivative that irreversibly and specifically suppresses thrombin-mediated platelet activation by binding with high affinity to the active site of thrombin (Ki: 0.24 nM). It has been utilized as an anticoagulant (100 μM) and to study thrombin-mediated fibrin deposition, angiogenesis, and proinflammatory processes.
Targets(IC50)	Others,PAI-1

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7699 mL	8.8497 mL	17.6994 mL
5 mM	0.354 mL	1.7699 mL	3.5399 mL
10 mM	0.177 mL	0.885 mL	1.7699 mL
50 mM	0.0354 mL	0.177 mL	0.354 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.

Reference

Palekar RU, Jallouk AP, Myerson JW, Pan H, Wickline SA. Inhibition of Thrombin With PPACK-Nanoparticles Restores Disrupted Endothelial Barriers and Attenuates Thrombotic Risk in Experimental Atherosclerosis. Arterioscler Thromb Vasc Biol. 2016 Mar;36(3):446-55. doi: 10.1161/ATVBAHA.115.306697. Epub 2016 Jan 14. PubMed PMID: 26769047; PubMed Central PMCID: PMC4767676.

Rahr HB, Sørensen JV, Danielsen D. Markers of coagulation and fibrinolysis in blood drawn into citrate with and without D-Phe-Pro-Arg-Chloromethylketone (PPACK). Thromb Res. 1994 Mar 1;73(5):279-84. PubMed PMID: 8016814.

Lyon ME, Drobot DW, Harding SR, Lyon AW. Evaluation of the thrombin inhibitor D-phenylalanyl-L-prolyl-L-arginine chloromethylketone (PPACK) with the factor Xa inhibitor 1,5-dansyl-L-glutamyl-L-glycyl-L-arginine chloromethylketone (GGACK) as anticoagulants for critical care clinical chemistry specimens. Clin Chim Acta. 1999 Feb;280(1-2):91-9. PubMed PMID: 10090527.

Yamashita T, Yamamoto J, Sasaki Y, Matsuoka A. The antithrombotic effect of low molecular weight synthetic thrombin inhibitors, argatroban and PPACK, on He-Ne laser-induced thrombosis in rat mesenteric microvessels. Thromb Res. 1993 Jan 1;69(1):93-100. PubMed PMID: 8465278.