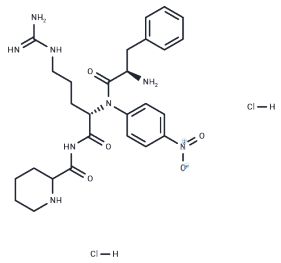
Data Sheet (Cat.No.T40711)

TargetMol

H-D-Phe-Pip-Arg-pNA dihydrochloride

Chemical Properties



CAS No. : 62354-65-8

Formula: C27H38Cl2N8O5

Molecular Weight: 625.55

Storage: Keep away from moisture
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	H-D-Phe-Pip-Arg-pNA dihydrochloride (S-2238 dihydrochloride), a chromogenic substrate, mimics the N-terminal fragment of the A alpha chain of fibrinogen, the native substrate of thrombin. Specifically designed for thrombin detection, it is employed for quantifying antithrombin-heparin cofactor (AT-III) and is characterized by its sensitivity, accuracy, and ease of implementation.
Targets(IC50)	Others

Solubility Information

Solubility	H2O: 125 mg/mL (199.82 mM),Sonication is recommended. DMSO: 125 mg/mL (199.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (6.39 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (15.99 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5986 mL	7.993 mL	15.9859 mL
5 mM	0.3197 mL	1.5986 mL	3.1972 mL
10 mM	0.1599 mL	0.7993 mL	1.5986 mL
50 mM	0.032 mL	0.1599 mL	0.3197 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

Goodnight SH Jr, et al. Measurement of antithrombin III in normal and pathologic states using chromogenic substrate S-2238. Comparison with immunoelectrophoretic and factor Xa inhibition assays. Am J Clin Pathol. 1980; 73(5):639-647.

Voorthuizen H, Kluft C. Improved assay conditions for automated antithrombin III determinations with the chromogenic substrate S-2238. Thromb Haemost. 1984;52(3):350-353.