Creative Enzymes®

H-D-Phe-Pip-Arg-pNA acetate

Cat. No. HDPG-001

Lot. No. (See product label)

Introduction

Description	H-D-Phe-Pip-Arg-pNA acetate is a chromogenic peptide substrate modeled on the N-terminal region of the fibrinogen Aα chain, the natural substrate of thrombin.
Applications	Chromogenic measurement of antithrombin-heparin cofactor (AT-III) using thrombin.
Synonyms	S-2238 acetate

Product Information

Appearance	White to yellow solid
Form	Solid
CAS No.	115388-96-0
Molecular Formula	$C_{29}H_{40}N_8O_7$
Molecular Weight	612.68
Purity	99.81%
Specificity	Thrombin
Function	Chromogenic substrate for thrombin in AT-III measurement.
Targets	Thrombin
Solubility	DMSO: 100 mg/mL (163.22 mM); ultrasonication is required. Hygroscopic DMSO can markedly affect solubility; use newly opened DMSO. H_2O: ≥ 100 mg/mL (163.22 mM); saturation is unknown.

Usage and Packaging

Preparation Instructions	Stock solution volume guide: 1 mM: 1 mg in 1.6322 mL; 5 mg in 8.1609 mL; 10 mg in 16.3217 mL. 5 mM: 1 mg in 0.3264 mL; 5 mg in 1.6322 mL; 10 mg in 3.2643 mL. 10 mM: 1 mg in 0.1632 mL; 5 mg in 0.8161 mL; 10 mg in 1.6322 mL. Select the solvent according to the solubility data. Aliquot prepared solutions to avoid repeated freeze-thaw cycles. If water is used for the stock solution, dilute it to the working solution and then sterilize through a 0.22 μm filter before use.

Storage and Shipping Information

Storage	Sealed storage, protected from moisture. Powder: -80°C for 2 years; -20°C for 1 year. In solvent: -80°C for 6 months; -20°C for 1 month.