



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

N-p-Tosyl-Gly-Pro-Arg p-nitroanilide acetate salt

Product Number **T 1637**

Storage Temperature -0°C

Product Description

Molecular Formula: $\text{C}_{26}\text{H}_{34}\text{N}_8\text{O}_7\text{S} \cdot \text{C}_2\text{H}_4\text{O}_2$

Molecular Weight: 662.7

CAS Number: 86890-95-1

K_M : 4.0 μM (bovine thrombin), 4.2 μM (human thrombin), 99 μM (human Factor X_a)¹

This product is used as a substrate for proteolytic enzymes.² A good review of chromogenic substrates for coagulation proteases has been reported.¹ Kinetic parameters for a number of p-nitroanilide (pNA) substrates with bovine thrombin, human thrombin, bovine Factor X_a , human Factor X_a , human plasmin, and urokinase have been tabulated. Besides this product, substrates described in this article include: BZ-Ile-Glu-Gly-Arg pNA (Product No. B 7020) BZ-Phe-Val-Arg pNA (Product No. B 7632) BZ-Pro-Phe-Arg pNA (Product No. B 2133) BZ-Val-Gly-Arg pNA (Product No. B 4758) Z-Val-Gly-Arg pNA (Product No. C 7271) TOS-Gly-Pro-Lys pNA (Product No. T 6140) D-Val-Leu-Lys pNA (Product No. V 7127).

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in ethanol (20 mg/ml), but some heating may be necessary.

Storage/Stability

This pNA peptide is stable for more than a year when stored in a frozen solution at pH 4 (deionized water adjusted with HCl).¹

References

1. Lottenberg, R., et al., Assay of coagulation proteases using peptide chromogenic and fluorogenic substrates. *Methods Enzymol.*, **80(pt. C)**, 341-361 (1981).
2. Pupkis, M. F., and Coombs, G. H., Purification and characterization of proteolytic enzymes of *Leishmania mexicana mexicana* amastigotes and promastigotes. *J. Gen. Microbiol.*, **130(pt. 9)**, 2375-2383 (1984).

HLD/RXR 1/03

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.