

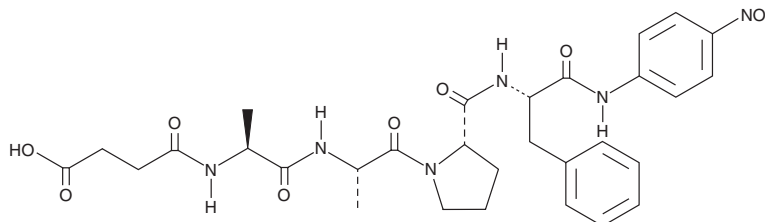
PRODUCT INFORMATION



Suc-AAPF-pNA

Item No. 14993

CAS Registry No.: 70967-97-4
Formal Name: N-(3-carboxy-1-oxopropyl)-L-alanyl-L-alanyl-L-prolyl-N-(4-nitrophenyl)-L-phenylalaninamide
Synonym: Succinyl-Ala-Ala-Pro-Phe-p-nitroanilide
MF: C₃₀H₃₆N₆O₉
FW: 624.7
Purity: ≥95%
UV/Vis.: λ_{max}: 314 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Suc-AAPF-pNA is supplied as a crystalline solid. A stock solution may be made by dissolving the Suc-AAPF-pNA in the solvent of choice, which should be purged with an inert gas. Suc-AAPF-pNA is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Suc-AAPF-pNA in these solvents is approximately 5 mg/ml.

Suc-AAPF-pNA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Suc-AAPF-pNA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Suc-AAPF-pNA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Suc-AAPF-pNA is a chromogenic substrate that can be cleaved by cathepsin G ($K_m = 1.7$ mM), subtilisin, chymotrypsin ($K_m = 60$ μM), chymase ($K_m = 4$ mM), and cyclophilin, but not neutrophil elastase.¹⁻⁴ Release of p-nitroanilide is monitored at 405-410 nm. This substrate can be used for inhibitor screening and kinetic analysis.

References

1. Nakajima, K. and Powers, J.C. Mapping the extended substrate binding site of cathepsin G and human leukocyte elastase. *J. Biol. Chem.* **254**(10), 4027-4032 (1979).
2. Ermolieff, J., Boudier, C., Laine, A., *et al.* Heparin protects cathepsin G against inhibition by protein proteinase inhibitors. *J. Biol. Chem.* **269**(47), 29502-29508 (1994).
3. Kofron, J.L., Kuzmic, P., Kishore, V., *et al.* Determination of kinetic constants for peptidyl prolyl cis-trans isomerases by an improved spectrophotometric assay. *Biochemistry* **30**(25), 6127-6134 (1991).
4. Nakakubo, H., Fukuyama, H., Nakajima, M., *et al.* Secretory production of recombinant human chymase as an active form in *Pichia pastoris*. *Yeast* **16**(4), 315-323 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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