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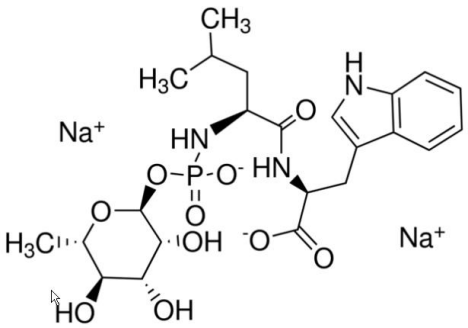
Product Information

Phosphoramidon, disodium salt

Catalog Number **R7385**
Storage Temperature –20 °C

CAS RN 119942-99-3
Synonyms: N-(α-Rhamnopyranosyloxyhydroxy-phosphinyl)-LEU-TRP, disodium salt

Product Description



Molecular Formula: $C_{23}H_{32}N_3Na_2O_{10}P$
Molecular Weight: 587.47
Extinction Coefficient for 1% aqueous solution of sodium salt:[1]
480 (221 nm)
76 (275 nm, shoulder)
81 (282 nm)
69.5 (289.5 nm)

Phosphoramidon is a metallo-endopeptidase inhibitor, which strongly inhibits thermolysin, but weakly inhibits collagenase. It does not inhibit trypsin, papain, chymotrypsin, nor pepsin.[1,2]

Mild hydrolysis of phosphoramidon yields phosphoryl-L-leucyl-L-tryptophan, which is more active than phosphoramidon.[1]

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Sigma tests the solubility of Phosphoramidon, disodium salt at 50 mg/ml in water yielding a clear to slightly hazy, colorless to light yellow solution. The product is also soluble in methanol and DMSO, and less soluble in ethanol and ethyl acetate; insoluble in benzene, hexane, and chloroform.[1]

Solutions, stored in aliquots at –20 °C, are expected to remain active for at least one month.

Storage/Stability

Store the product at –20 °C. Under these conditions it is expected to remain active for at least two years.

References

1. Lorand, L. ed., *Methods in Enzymology*, **45**, 693-695 (1976).
2. Suda, H. et al., *Journal of Antibiotics*, **26**, 621-623 (1973).
3. Umezawa, S. et al., *Tetrahedron Letters*, **1**, 97-100 (1972).
4. Aoyagi, T., and Umezawa, H., *Acta Biol. Med Ger.*, **40**, 1523-1529 (1981).

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