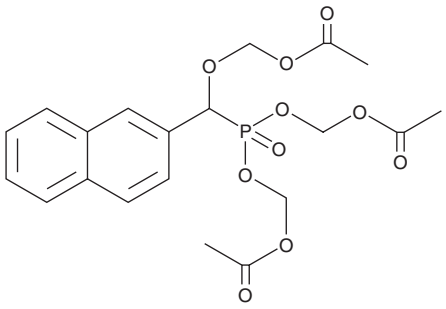
PRODUCT INFORMATION

HNMPA-(AM)$_3$

Item No. 23245

CAS Registry No.:	120944-03-8
Formal Name:	P-[[(acetyloxy)methoxy]-2-naphthalenylmethyl]-phosphonic acid, *bis*[(acetyloxy)methyl] ester
MF:	$C_{20}H_{23}O_{10}P$
FW:	454.4
Purity:	≥95%
UV/Vis.:	λ_{max}: 229 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

HNMPA-(AM)$_3$ is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of HNMPA-(AM)$_3$ in these solvents is approximately 1 and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of HNMPA-(AM)$_3$ is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of HNMPA-(AM)$_3$ in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

HNMPA-(AM)$_3$ is a cell-permeable prodrug form of the insulin receptor tyrosine kinase (IRTK) inhibitor HNMPA (Item No. 15543).[1] HNMPA-(AM)$_3$ inhibits IRTK autophosphorylation in CHO cells expressing the human receptor in a concentration- and time-dependent manner. It inhibits 2-deoxyglucose uptake but does not affect insulin-stimulated thymidine uptake in CHO cells at concentrations up to 100 µM.

Reference

1. Saperstein, R., Vicario, P.P., Strout, H.V., *et al.* Design of a selective insulin receptor tyrosine kinase inhibitor and its effect on glucose uptake and metabolism in intact cells. *Biochemistry* **28(13)**, 5694-5701 (1989).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM