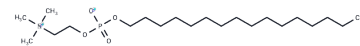


Miltefosine

Chemical Properties

CAS No. :	58066-85-6
Formula:	C ₂₁ H ₄₆ NO ₄ P
Molecular Weight:	407.57
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Miltefosine (HePC) is the treatment of visceral and cutaneous leishmaniasis drug, and is proceeding clinical trials for this in several countries. Several medical agents produce some potency against visceral or cutaneous leishmaniasis, however a 2005 survey concluded that miltefosine is the only effective oral treatment for both forms of leishmaniasis.
Targets(IC50)	Akt,HIV Protease,Parasite,PKC
Kinase Assay	Levels of enzymatically active caspase-3 are quantified using the ApoAlert Caspase Fluorescent assay kit. Briefly, 1×10 ⁶ BC-1 PEL cells are treated with 50 μM Miltefosine, 50 μM Perifosine, or 20 nM NVP-BE2235, as well as the respective vehicle controls. Cells are harvested and lysed 12 hours later. Equivalent micrograms of cell lysate for all samples are incubated with a fluorogenic caspase-3 substrate (DEVD-AFC). Cleavage of DEVD by caspase-3 releases AFC, the fluorescence of which is measured using a FLUOstar OPTIMA fluorometer, with excitation and emission filter wavelengths set to 400 and 505 nm, respectively[3].
Cell Research	2 × 10 ⁵ PEL cells are treated with the therapeutic compounds at the indicated doses or with appropriate vehicle as a negative control. Cells are followed for 96 hours, and cell viability is determined by trypan blue exclusion performed in quadruplicate. (Only for Reference)

Solubility Information

Solubility	H ₂ O: 10 mM,Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4536 mL	12.2678 mL	24.5357 mL
5 mM	0.4907 mL	2.4536 mL	4.9071 mL
10 mM	0.2454 mL	1.2268 mL	2.4536 mL
50 mM	0.0491 mL	0.2454 mL	0.4907 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chugh P, et al. *Retrovirology*, 2008, 5, 11.

Zhang X, Zhang C, Lu S, et al. Miltefosine reinvigorates exhausted T cells by targeting their bioenergetic state. *Cell Reports Medicine*.2024

Wang Z, Zou W, Zeng Q, et al. Novel Hsp90 α inhibitor inhibits HSV-1 infection by suppressing the Akt/ β -catenin pathway. *International Journal of Antimicrobial Agents*.2025: 107448.

Ruiter GA, et al. *Anticancer Drugs*, 2003, 14(2), 167-173.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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