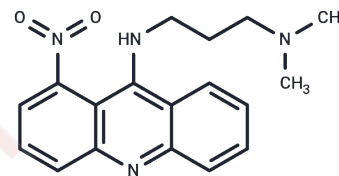


Nitracrine

Chemical Properties

CAS No. :	4533-39-5
Formula:	C ₁₈ H ₂₀ N ₄ O ₂
Molecular Weight:	324.38
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	Nitracrine is a 1-nitroacridine derivative and is an effective hypoxia-selective agent in vitro and antitumor drugs. Nitracrine suppresses RNA synthesis and covalently, reversibly binds to DNA but also forms covalent adducts with DNA in vivo. Nitracrine has cytotoxicity towards most cells.
Targets(IC50)	Others,DNA/RNA Synthesis
In vitro	Under illumination after 1 hour of cell incubation, Nitracrine has LD50s of 0.23 μM, 0.6 μM, 0.16 μM in P388 cell, NIH3T3 cell, and K562 cells, respectively. Nitracrine (2 μM; 1 hour) induces the death of 50% of human erythroleukemia K562 cells under illumination for 48 min. While it is 8.5 hours for Nitracrine in the dark [3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0828 mL	15.414 mL	30.828 mL
5 mM	0.6166 mL	3.0828 mL	6.1656 mL
10 mM	0.3083 mL	1.5414 mL	3.0828 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 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

- Wilson WR, et al. Selective toxicity of nitracrine to hypoxic mammalian cells. Br J Cancer. 1984 Feb;49(2):215-23.
- Gniazdowski M, et al. Nitracrine and its congeners--an overview. Gen Pharmacol. 1995 May;26(3):473-81.
- Daghasanli NA, et al. Cytotoxicity of nitroheterocyclic compounds, quinifuryl and nitracrine, towards leukaemic and normal cells on the dark and under illumination with visible light. J Photochem Photobiol B. 2004 Jul 19;75(1-2):27-32.

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