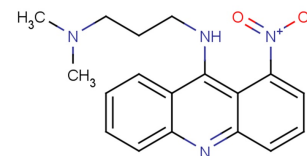


## Nitracrine

## Chemical Properties

CAS No.:	4533-39-5
Formula:	C18H20N4O2
Molecular Weight:	324.38
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



## 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(IC <sub>50</sub> )	Others: None
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].

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
------------	---

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.083 mL	15.414 mL	30.828 mL
5 mM	0.617 mL	3.083 mL	6.166 mL
10 mM	0.308 mL	1.541 mL	3.083 mL
50 mM	0.062 mL	0.308 mL	0.617 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

### 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.
- Daghastanli 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.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481