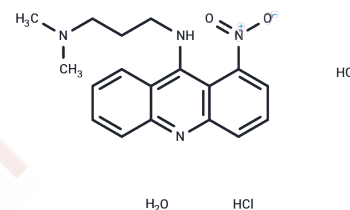


Nitracrine dihydrochloride hydrate

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 55429-45-3 |
| Formula: | C ₁₈ H ₂₄ Cl ₂ N ₄ O ₃ |
| Molecular Weight: | 415.31 |
| 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 (dihydrochloride hydrate), a 1-nitroacridine derivative, inhibits RNA synthesis, reversibly binds to DNA, and forms covalent adducts with DNA in vivo. It is a potent hypoxia-selective and antitumor agent in vitro, exhibiting cytotoxicity towards most cells [1] [2] [3]. |
| Targets(IC50) | DNA/RNA Synthesis |
| In vitro | Nitracrine (2 μM; 1 h) causes 50% mortality in human erythroleukemia K562 cells when exposed to light for 48 minutes, while it requires 8.5 hours in darkness [3]. The LD50 values for nitracrine in P388, NIH3T3, and K562 cells are 0.23 μM, 0.6 μM, and 0.16 μM, respectively, after 1 hour of incubation under light [3]. Cell Viability Assay [3] Cell Line: Human erythroleukemia K562 cells Concentration: 2 μM Incubation Time: 1h Result: Achieved 50% cell death under 48 minutes of illumination. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.4078 mL | 12.0392 mL | 24.0784 mL |
| 5 mM | 0.4816 mL | 2.4078 mL | 4.8157 mL |
| 10 mM | 0.2408 mL | 1.2039 mL | 2.4078 mL |
| 50 mM | 0.0482 mL | 0.2408 mL | 0.4816 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

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