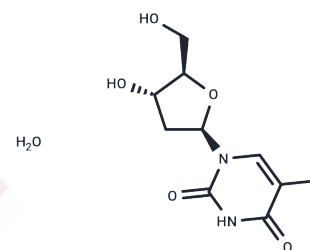


Idoxuridine hydrate

Chemical Properties

CAS No. :	17140-71-5
Formula:	C ₉ H ₁₃ N ₂ O ₆
Molecular Weight:	372.115
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	Idoxuridine hydrate (5-Iodo-2'-deoxyuridine, 5-IUdR, IdUrd) is a competitive inhibitor of phosphorylases. As an iodinated thymidine analogue, it effectively inhibits DNA polymerase and hinders viral replication, making it useful in the treatment of viral eye infections such as herpes simplex keratitis. Against feline herpesvirus, Idoxuridine has been found to have an IC ₅₀ value of 4.3 μM [1].
Targets(IC ₅₀)	Others,Phosphatase
In vitro	Idoxuridine hydrate, at concentrations ranging between 2-10 μM over a 72-hour period, exhibits an antiviral IC ₅₀ value of 4.3 μM, as demonstrated in a Cell Proliferation Assay on Crandell-Reese feline kidney (CRFK) cells. Additionally, a Cell Cytotoxicity Assay revealed that exposure to concentrations of 5-50 μM for the same duration resulted in a relative reduction of 10.8% in CRFK cell viability.
In vivo	Idoxuridine hydrate, administered through intraperitoneal injection at a dosage of 50-200 mg/kg for three times at three-hour intervals, has been shown to enhance the production of hemolysin plaque-forming cells (HPFC) against sheep red blood cells (SRBC) in both female and male C3HeB/Fej mice as well as A/J male mice. This effect was observed across the specified dosage range.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6873 mL	13.4365 mL	26.8731 mL
5 mM	0.5375 mL	2.6873 mL	5.3746 mL
10 mM	0.2687 mL	1.3437 mL	2.6873 mL
50 mM	0.0537 mL	0.2687 mL	0.5375 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

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