

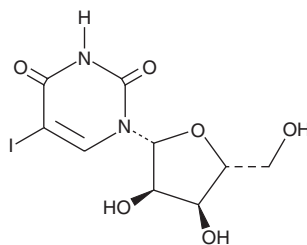
PRODUCT INFORMATION



5-Iodouridine

Item No. 35697

CAS Registry No.: 1024-99-3
Formal Name: 5-iodo-uridine
Synonyms: IUd, IUrd, NSC 523375
MF: $C_9H_{11}IN_2O_6$
FW: 370.1
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

5-Iodouridine is supplied as a solid. A stock solution may be made by dissolving the 5-iodouridine in the solvent of choice, which should be purged with an inert gas. 5-Iodouridine is soluble in methanol. 5-Iodouridine is slightly soluble in acetonitrile.

5-Iodouridine is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

5-Iodouridine is a derivative of the pyrimidine nucleoside uridine (Item No. 20300). It inhibits dihydroorotase ($K_i = 340 \mu\text{M}$ for the rat enzyme).¹ 5-Iodouridine sensitizes Don Chinese hamster lung cells to irradiation in a concentration-dependent manner.² It has been used in the synthesis of compounds with antiviral and anticancer activities.³

References

1. Bresnick, E. and Blatchford, K. Inhibition of dihydroorotase by purines and pyrimidines. *Biochim. Biophys. Acta* **81(1)**, 150-157 (1964).
2. Kuroda, Y., Yokoiyama, A., and Kada, T. Radiosensitization of cultured mammalian cells by 5-iodouridine. *Int. J. Radiat. Biol. Relat. Stud. Phys. Chem. Med.* **27(3)**, 247-257 (1975).
3. Kumar, R., Xu, L.H., Knaus, E.E., et al. Synthesis and antiviral and cytotoxic activity of iodohydrin and iodomethoxy derivatives of 5-vinyl-2'-deoxyuridines, 2'-fluoro-2'-deoxyuridine, and uridine. *J. Med. Chem.* **33(2)**, 717-723 (1990).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/29/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM