

## Produktinformation



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Diagnostik & molekulare Diagnostik
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#### SZABO-SCANDIC HandelsgmbH

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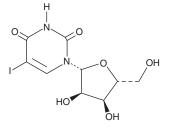
# **PRODUCT** INFORMATION



5-lodouridine

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:** ≥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-lodouridine 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-lodouridine is soluble in methanol. 5-lodouridine is slightly soluble in acetonitrile.

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

#### 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).
- Kumar, R., Xu, L.H., Knaus, E.E., et al. Synthesis and antiviral and cytotoxic activity of iodohydrin and 3. 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

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