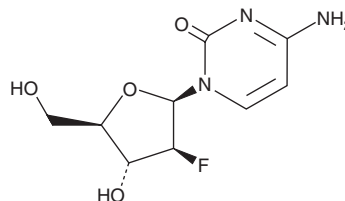


PRODUCT INFORMATION

2'-Fluoro-2'-deoxy-arabino-Cytidine

Item No. 39935

CAS Registry No.: 56632-83-8
Formal Name: 4-amino-1-(2-deoxy-2-fluoro-β-D-arabinofuranosyl)-2(1H)-pyrimidinone
Synonyms: 2'-Ara-FdC, FAC
MF: C₉H₁₂FN₃O₄
FW: 245.2
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

2'-Fluoro-2'-deoxy-arabino-cytidine is supplied as a solid. A stock solution may be made by dissolving the 2'-fluoro-2'-deoxy-arabino-cytidine in the solvent of choice, which should be purged with an inert gas. 2'-Fluoro-2'-deoxy-arabino-cytidine is soluble in DMSO and methanol.

Description

2'-Fluoro-2'-deoxy-arabino-cytidine is a fluorinated derivative of the deoxyribonucleoside 2'-deoxycytidine (Item Nos. 34708 | 30125).¹ It is cytotoxic to CCRF-HSB-2 T lymphoblast, COLO 320DM colon, and MKN28 gastric cancer cells (IC₅₀s = 0.15, 0.19, and 29 μg/ml, respectively). 2'-Fluoro-2'-deoxy-arabino-cytidine inhibits HIV-1 replication in HIV-1-infected C8166 cells (IC₅₀ = 0.7 μM), as well as herpes simplex virus 1 (HSV-1) and HSV-2 replication in HSV-1- or HSV-2-infected Vero cells (IC₅₀s = 0.12 and 0.3 μM, respectively).^{1,2}

References

1. Miura, S., Yoshimura, Y., Endo, M., *et al.* Antitumor activity of a novel orally effective nucleoside, 1-(2-deoxy-2-fluoro-4-thio-β-D-arabinofuranosyl)cytosine. *Cancer Lett.* **129(1)**, 103-110 (1998).
2. Martin, J.A., Bushnell, D.J., Duncan, I.B., *et al.* Synthesis and antiviral activity of monofluoro and difluoro analogues of pyrimidine deoxyribonucleosides against human immunodeficiency virus (HIV-1). *J. Med. Chem.* **33(8)**, 2137-2145 (1990).
3. Watanabe, K.A., Su, T.-L., Klein, R.S., *et al.* Nucleosides. 123. Synthesis of antiviral nucleosides: 5-substituted 1-(2-deoxy-2-halogeno-β-D-arabinofuranosyl)cytosines and -uracils. Some structure-activity relationships. *J. Med. Chem.* **26(2)**, 152-156 (1983).

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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