

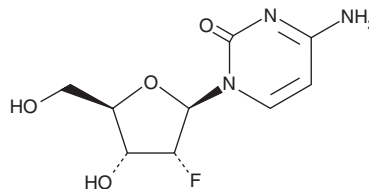
PRODUCT INFORMATION



2'-Fluoro-2'-deoxycytidine

Item No. 40305

CAS Registry No.: 10212-20-1
Formal Name: 2'-deoxy-2'-fluoro-cytidine
Synonyms: 2'-Deoxy-2'-fluorocytidine, 2'-FdC,
NSC 529432
MF: $C_9H_{12}FN_3O_4$
FW: 245.2
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

2'-Fluoro-2'-deoxycytidine is supplied as a solid. A stock solution may be made by dissolving the 2'-fluoro-2'-deoxycytidine in the solvent of choice, which should be purged with an inert gas. 2'-Fluoro-2'-deoxycytidine is soluble (≥ 10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

2'-Fluoro-2'-deoxycytidine is an antiviral nucleoside.¹ It reduces the replication of herpes simplex virus 1 (HSV-1), HSV-2, pseudorabies virus (PRV), or equine abortion virus in virus-infected BHK-21 cells when used at concentrations ranging from 5 to 20 $\mu\text{g/ml}$. 2'-Fluoro-2'-deoxycytidine inhibits replication of the influenza A subtypes H1N1, H3N2, and H5N1 and influenza B viruses in virus-infected MDCK cells ($\text{IC}_{50}\text{s} = 3.2, 0.59, 1.4, \text{ and } 1.9 \mu\text{M}$, respectively) without inducing cytotoxicity ($\text{CC}_{50} = >100 \mu\text{M}$ for all).²

References

1. Wohlrab, F., Jamieson, A.T., Hay, J., *et al.* The effect of 2'-fluoro-2'-deoxycytidine on herpes virus growth. *Biochim. Biophys. Acta* **824**(3), 233-242 (1985).
2. Kumaki, Y., Day, C.W., Smee, D.F., *et al.* *In vitro* and *in vivo* efficacy of fluorodeoxycytidine analogs against highly pathogenic avian influenza H5N1, seasonal, and pandemic H1N1 virus infections. *Antiviral Res.* **92**(2), 329-340 (2011).

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.

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