2'-Deoxy-5-fluorocytidine

Catalog No: 14108, 14109 Format: 250 mg, 50 mg

Chemical Properties:

$$\begin{split} &\mathsf{MW} = 245.2\\ &\mathsf{C}_9\mathsf{H}_{12}\mathsf{FN}_3\mathsf{O}_4\\ &\mathsf{CAS}\ 10356\text{-}76\text{-}0\\ &\mathsf{Physical Properties:}\ \ White\ solid;\ \mathsf{MP} = 196^\circ\mathsf{C}\\ &\mathsf{Names:}\ 2'\text{-}\mathsf{Deoxy}\text{-}5\text{-}\mathsf{fluorocytidine},\ 5\text{-}\mathsf{Fluoro}\text{-}2'\text{-}\mathsf{deoxycytidine};\ \mathsf{FCDR};\ \mathsf{FdCyd};\\ &\mathsf{NSC}\text{-}48006 \end{split}$$

Pharmacology: A DNA methyltransferase inhibitor currently in clinical trials for breast cancer and other solid tumors (ref 1). Like 5-Azacytidine and decitabine, 2'-Deoxy-5-fluorocytidine is a pyrimidine analog that integrates into chromatin to inhibit DNA methylation (ref 2). It blocks proliferation in colon cancer-derived HCT116 cells by activating DNA response pathways (ref 3). It inhibits various strains of pathogenic avian influenza viruses *in vitro* and *in vivo* (ref 4).

Solubilization: May be dissolved in DMSO (20 mg/ml)

Fluorescent Properties: N/A

Quality Control: >98% (TLC); NMR (Conforms)

References:

- 1. J Ren et al. Cell Signal. 2011, 23:1082
- 2. H Gowher et al. Cancer Biol. Ther. 2004, 3:1062
- 3. Q Zhao et al. Springerplus 2002, 1:65
- 4. Y Kumaki et al. Antiviral Res. 2011, 92:329

Storage and Guarantee: Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 1 month. This product is guaranteed for 6 months from date of arrival.



