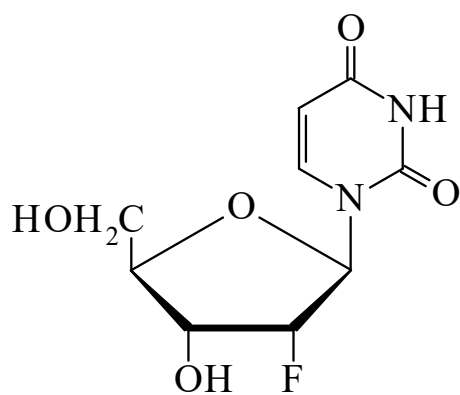




>>Entry Name: 2'-Deoxy-2'-fluorouridine, 9CI



CAS Registry Number: 784-71-4

Molecular Formula: $C_9H_{11}FN_2O_5$

Molecular Weight: 246.195

Accurate Mass: 246.065201

Percentage Composition: C 43.91%; H 4.50%; F 7.72%; N 11.38%; O 32.49%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 150-151°

Optical Rotation: $[\alpha]_D^{20} +52$ (c, 0.3 in H_2O)

>>Derivative: 5'-Phosphate

Synonym(s): 2-Deoxy-5-fluoro-5'-uridylic acid, 9CI

CAS Registry Number: 134-46-3

Molecular Formula: $C_9H_{12}FN_2O_8P$

Molecular Weight: 326.175

Accurate Mass: 326.031533

Percentage Composition: C 33.14%; H 3.71%; F 5.82%; N 8.59%; O 39.24%; P 9.50%

Source/Synthesis: Metab. of 5-fluorouracil

Use/Importance: Cytotoxic inhibitor of thymidilate synthetase

References:

- Hartmann, K.U. *et al.*, *J. Biol. Chem.*, 1961, **236**, 3006-3013, (*biochem*)
Codington, J.F. *et al.*, *J.O.C.*, 1964, **29**, 558, (*synth*)
Ludwig, J. *et al.*, *Synthesis*, 1982, 32-34, (*synth*, *P-31 nmr*, *phosphate*)
Amarnath, V. *et al.*, *Biochim. Biophys. Acta*, 1983, **741**, 224-229, (*synth*, *phosphate*)
Kawasaki, A.M. *et al.*, *J. Med. Chem.*, 1993, **36**, 361, (*synth*, *pmr*, *cmr*)