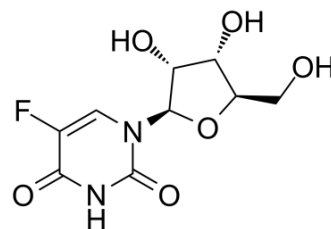


## 5-Fluorouridine

Cat. No.:	HY-107856
CAS No.:	316-46-1
Molecular Formula:	C <sub>9</sub> H <sub>11</sub> FN <sub>2</sub> O <sub>6</sub>
Molecular Weight:	262.19
Target:	Others
Pathway:	Others
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (381.40 mM)  
 H<sub>2</sub>O : 100 mg/mL (381.40 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.8140 mL	19.0701 mL	38.1403 mL
	5 mM	0.7628 mL	3.8140 mL	7.6281 mL
	10 mM	0.3814 mL	1.9070 mL	3.8140 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (9.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (9.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (9.54 mM); Clear solution
- Add each solvent one by one: PBS  
Solubility: 110 mg/mL (419.54 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

5-Fluorouridine is a metabolite of 5-fluorouracil with anticancer activity<sup>[1][2][3][4]</sup>. 5-fluorouridine inhibits rRNA synthesis of human colon carcinoma cells<sup>[3]</sup>. 5-Fluorouridine exhibits cytotoxic effect on growth of L1210 cells with an IC<sub>50</sub> of 2 nM<sup>[4]</sup>.

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## REFERENCES

- [1]. Wu FL , et al. Gelatinases-stimuli nanoparticles encapsulating 5-fluorouridine and 5-aza-2'-deoxycytidine enhance the sensitivity of gastric cancer cells to chemical therapeutics. *Cancer Lett.* 2015 Jul 10;363(1):7-16.
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- [3]. Glazer RI, et al. Association of cell lethality with incorporation of 5-fluorouracil and 5-fluorouridine into nuclear RNA in human colon carcinoma cells in culture. *Mol Pharmacol.* 1982 Mar;21(2):468-73.
- [4]. Kanzawa F, et al. Differences between 5-fluoro-2'-deoxyuridine and 5-fluorouridine in their cytotoxic effect on growth of murine lymphoma L5178Y cells in in vivo and in vitro systems. *Eur J Cancer.* 1980 Aug;16(8):1087-92.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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