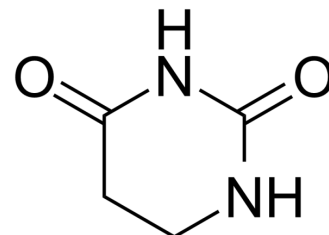


Dihydrouracil

Cat. No.:	HY-W012926
CAS No.:	504-07-4
Molecular Formula:	C ₄ H ₆ N ₂ O ₂
Molecular Weight:	114.1
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 14.29 mg/mL (125.24 mM; Need ultrasonic)
 H₂O : 10 mg/mL (87.64 mM; ultrasonic and warming and heat to 60°C)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		8.7642 mL	43.8212 mL	87.6424 mL
	5 mM		1.7528 mL	8.7642 mL	17.5285 mL
	10 mM		0.8764 mL	4.3821 mL	8.7642 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: ≥ 1.43 mg/mL (12.53 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 1.43 mg/mL (12.53 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.43 mg/mL (12.53 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Dihydrouracil (5,6-Dihydrouracil), a metabolite of Uracil, can be used as a marker for identification of dihydropyrimidine dehydrogenase (DPD)-deficient ^{[1][2]} .
IC ₅₀ & Target	Human Endogenous Metabolite

REFERENCES

- [1]. Henricks LM, et, al. Food-effect study on uracil and dihydrouracil plasma levels as marker for dihydropyrimidine dehydrogenase activity in human volunteers. Br J Clin Pharmacol. 2018 Dec;84(12):2761-2769.
- [2]. Jacobs BAW, et, al. The impact of liver resection on the dihydrouracil:uracil plasma ratio in patients with colorectal liver metastases. Eur J Clin Pharmacol. 2018 Jun;74(6):737-744.
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Caution: Product has not been fully validated for medical applications. For research use only.

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