Dihydrouracil

Cat. No.: HY-W012926

CAS No.: 504-07-4

Molecular Formula: $C_4H_6N_2O_2$

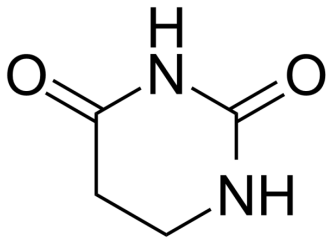
Molecular Weight: 114.1

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)

H_2O : 10 mg/mL (87.64 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
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

1. 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
2. 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
3. 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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