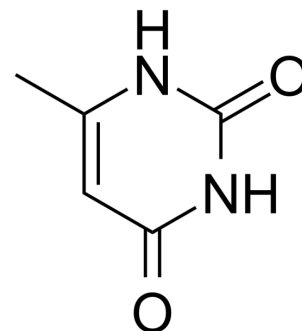


## 6-Methyluracil

<b>Cat. No.:</b>	HY-Y1125		
<b>CAS No.:</b>	626-48-2		
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	126.11		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (396.48 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	7.9296 mL	39.6479 mL	79.2959 mL
		5 mM	1.5859 mL	7.9296 mL	15.8592 mL
10 mM		0.7930 mL	3.9648 mL	7.9296 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 4.55 mg/mL (36.08 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (19.82 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (19.82 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	6-Methyluracil (Pseudothymine), a metabolite of Uracil, can be used as an indicator of acetoacetyl-CoA (AACoA) accumulation. 6-Methyluracil exhibits antiradiation effect <i>in vivo</i> <sup>[1][2]</sup> .
<b>In Vivo</b>	6-Methyluracil (50 mg/kg; a single i.p.) produces a pronounced radioprotective effect in BALB and SHK mice <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Cromby CH, et, al. 6-Methyluracil excretion in 2-methylacetoacetyl-CoA thiolase deficiency and in two children with an unexplained recurrent ketoacidaemia. J Inherit Metab Dis. 1994;17(1):81-4.
- [2]. Taran IP, et, al. [The antiradiation action of 6-methyluracil]. Radiobiologija. Mar-Apr 1993;33(2):285-90.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA