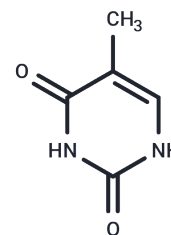


## Thymine

## Chemical Properties

CAS No. :	65-71-4
Formula:	C <sub>5</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub>
Molecular Weight:	126.11
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Thymine is one of the four bases of DNA and is able to act as a target for 5-fluorouracil in animal cancer models with Km=2.3 μM.
Targets(IC50)	Endogenous Metabolite

## Solubility Information

Solubility	DMSO: 100 mg/mL (792.96 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (79.3 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (79.3 mM), Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.9296 mL	39.6479 mL	79.2959 mL
5 mM	1.5859 mL	7.9296 mL	15.8592 mL
10 mM	0.793 mL	3.9648 mL	7.9296 mL
50 mM	0.1586 mL	0.793 mL	1.5859 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Tuchman M, et al. Effects of uridine and thymidine on the degradation of 5-fluorouracil, uracil, and thymine by rat liver dihydropyrimidine dehydrogenase. Cancer Res. 1985 Nov;45(11 Pt 1):5553-6.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481