Data Sheet (Cat.No.T37344)

TargetMol

5,6-dimethyl-2-Thiouracil

Chemical Properties

CAS No. : 28456-54-4

Formula: C6H8N2OS

Molecular Weight: 156.206

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	5,6-dimethyl-2-Thiouracil is a heterocyclic building block that has been used in the synthesis of anti-HIV-1 pyrimidinones.1 It has also been used as an internal standard for the quantification of thyreostats, including 2-thiouracil, in bovine plasma.2
Targets(IC50)	Others

Solubility Information

Solubility	DMF:PBS (pH 7.2) (1:4): 0.20 mg/mL (1.28 mM),Sonication is recommended. DMSO: 10.00 mg/mL (64.02 mM),Sonication is recommended. DMF: 15.00 mg/mL (96.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.4016 mL	32.0082 mL	64.0164 mL
5 mM	1.2803 mL	6.4016 mL	12.8033 mL
10 mM	0.6402 mL	3.2008 mL	6.4016 mL
50 mM	0.128 mL	0.6402 mL	1.2803 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

Navrotskii, M.B. Synthesis and anti-HIV-1 activity of new 2-[(2-phthalimidoethyl)thio]-4(3H)-pyrimidinone derivatives. Pharm. Chem. J. 39(9), 466-467 (2005).
Schmidt, K.S. In-house validation and factorial effect analysis of a liquid chromatography-tandem mass spectrometry method for the determination of thyreostats in bovine blood plasma. Anal. Bioanal. Chem. 406(3), 735-743 (2014).

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