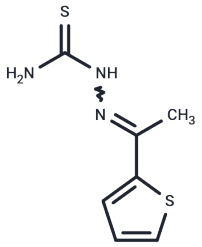
Data Sheet (Cat.No.T35680)

TargetMol

2-Acetylthiophene thiosemicarbazone

Chemical Properties



CAS No. : 5351-71-3

Formula: C7H9N3S2

Molecular Weight: 199.3

Storage: Store at low temperature
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	2-Acetylthiophene thiosemicarbazone is an antimicrobial agent that exhibits antimicrobial activity against a wide range of gram-negative (E. coli, P. aeruginosa, and S. marcescens) and gram-positive (S. aureus, M. luteus, and B. cereus) bacteria. In addition, it has antimicrobial activity against a wide range of fungi (C. albicans, G. candidum, T. rubrum, F. oxysporum, A. flavus, and S. brevicaulis).
Targets(IC50)	Antibacterial

Solubility Information

Solubility	Ethanol: < 1?mg/mL?(insoluble?or?slightly?soluble),< 0.1 mg/mL (insoluble) DMSO:PBS (pH 7.2) (1:4): < 1?mg/mL?(insoluble?or?slightly?soluble),< 0.1 mg/mL (insoluble) DMSO: 20 mg/mL (100.35 mM),Sonication is recommended. DMF: 20 mg/mL (100.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.0176 mL	25.0878 mL	50.1756 mL
5 mM	1.0035 mL	5.0176 mL	10.0351 mL
10 mM	0.5018 mL	2.5088 mL	5.0176 mL
50 mM	0.1004 mL	0.5018 mL	1.0035 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

Ali, et al. "Organoplatinum (II) complexes with 2-acetylthiophene thiosemicarbazone: synthesis, characterization, crystal structures, and in vitro antitumor activity." Organometallics 31.6 (2012): 2256-2262.
Gomha, S.M., Edrees, M.M., and Altalbawy, F.M.A.Synthesis and characterization of some new bis-pyrazolyl-thiazoles incorporating the thiophene moiety as potent anti-tumor agentsInt. J. Mol. Sci.17(9)1499(2016)

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