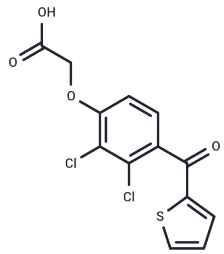
Data Sheet (Cat.No.T36125)

TargetMol

Tienilic Acid

Chemical Properties



CAS No. : 40180-04-9

Formula: C13H8Cl2O4S

Molecular Weight: 331.17

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	Tienilic Acid is a uricosuric diuretic with certain hepatotoxicity
Targets(IC50)	Others,Cytochromes P450
In vivo	In female and male Sprague-Dawley rats, Tienilic Acid decreased blood pressure and serum uric acid at 30 mg/kg. Tienilic acid decreased slightly hemoglobin and increased S-GPT at 120 and 480 mg/kg. Tienilic Acid significantly increase the liver weight and serum magnesium concentration in male rats, while the liver weight of female rats increased only slightly. Tienilic Acid also induced unicellular necrosis of small groups of liver cells[2].

Solubility Information

Solubility	Acetone-d6: 250 mg/mL (754.9 mM),Sonication and heating to 80℃ are recommended. DMSO: 250 mg/mL (754.9 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 (30.2 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (30.2 mM),Suspension. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0196 mL	15.098 mL	30.196 mL
5 mM	0.6039 mL	3.0196 mL	6.0392 mL
10 mM	0.302 mL	1.5098 mL	3.0196 mL
50 mM	0.0604 mL	0.302 mL	0.6039 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

Levron, J.C., et al. Pharmacokinetic study of 2,3-dichloro 4- (2-thienyl keto14C) phenoxyacetic acid (tienilic acid) in animals. European Journal of Drug Metabolism and Pharmacokinetics 2, 107–120 (1977).
Oker-Blom C, et al. Toxicological studies on tienilic acid in rats. Toxicol Lett. 1980;6(2):93-99.
Lemieux G, et al, Baverel G. Metabolic effects in man of tienilic acid, a new diuretic with uricosuric properties. Nephron. 1978;20(1):54-64.

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