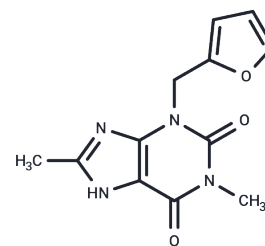


Furafylline

Chemical Properties

CAS No. :	80288-49-9
Formula:	C ₁₂ H ₁₂ N ₄ O ₃
Molecular Weight:	260.25
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	Furafylline is a selective inhibitor of human cytochrome P450 (CYP)1A2 (IC ₅₀ : 0.07 μM),
Targets(IC ₅₀)	Cytochromes P450
In vitro	Furafylline was a potent, non-competitive inhibitor of high affinity phenacetin O-deethylase activity of microsomal fractions of human liver, a reaction catalysed by P450IA2, with an IC ₅₀ value of 0.07 microM[1].
In vivo	Furafylline was originally introduced as a bronchodilator with extended duration compared to theophylline[1].

Solubility Information

Solubility	DMSO: 12.5 mg/mL (48.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7.68 mM),Sonication is recommended. <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	3.8425 mL	19.2123 mL	38.4246 mL
5 mM	0.7685 mL	3.8425 mL	7.6849 mL
10 mM	0.3842 mL	1.9212 mL	3.8425 mL
50 mM	0.0768 mL	0.3842 mL	0.7685 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

Sesardic D , Boobis A R , Murray B P , et al. Furaflavone is a potent and selective inhibitor of cytochrome P450IA2 in man.[J]. British Journal of Clinical Pharmacology, 1990, 29(6):651-663.

Tarrus E, Cami J, Roberts DJ, et al. Accumulation of caffeine in healthy volunteers treated with furaflavone[J]. Br J Clin Pharmacol. 1987 Jan;23(1):9-18.

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